

INTERNATIONALLY BESTSELLING AUTHOR OF *LOST CONNECTIONS*

JOHANN HARI

Stolen Focus

Why You
Can't Pay
Attention

'Brilliant ...
Everyone
should read it'
PHILIPPA PERRY

BLOOMSBURY

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被盗的焦点

For my grandmothers, Amy McRae and Lydia Hari

献给我的祖母艾米·麦克雷和莉迪亚·哈里

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STOLEN FOCUS

Why You Can't Pay Attention

JOHANN HARI

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I have posted audio clips of all the people I quote in this book on the website, so as you read this book, you can listen along to our conversations. Go to www.stolenfocusbook.com/audio

我在网站上发布了本书中引用的所有人物的音频片段，以便您在阅读本书时可以聆听我们的对话。访问
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Walking in Memphis

行走在孟菲斯

When he was nine years old, my godson developed a brief but freakishly intense obsession with Elvis Presley. He took to singing ‘Jailhouse Rock’ at the top of his voice, with all the low crooning and pelvis-jiggling of the King himself.

当我的教子九岁时，他对埃尔维斯·普雷斯利产生了短暂但异常强烈的痴迷。他开始用最高的声音唱《监狱摇滚》，带着国王本人的低沉低吟和骨盆抖动。

He didn’t know this style had become a joke, so he offered it with all the heart-catching sincerity of a pre-teen who believes he is being cool. In the brief pauses before he started singing it all over again, he demanded to know everything (‘Everything!

他不知道这种风格已经成为一个笑话，所以他以一个相信自己很酷的青春期的孩子的所有令人心碎的真实来提供它。在他重新开始唱之前的短暂停顿中，他要求知道一切（“一切！

Everything!’) about Elvis, and so I jabbered out the rough outline of that inspiring, sad, stupid story.

一切！’) 关于埃尔维斯，所以我喋喋不休地勾勒出这个鼓舞人心、悲

伤、愚蠢的故事的大致轮廓。

Elvis was born in one of the poorest towns in Mississippi – a place far, far away, I said. He arrived in the world alongside his twin brother, who died a few minutes later.

埃尔维斯出生在密西西比州最贫穷的城镇之一——我说的是一个很远很远的地方。他和他的双胞胎兄弟一起来到了这个世界，几分钟后他的双胞胎兄弟就去世了。

As he grew up, his mother told him that if he sang to the moon every night, his brother could hear his voice, so he sang and sang. He began to perform in public just as television was taking off – so in a sudden swoosh, he became more famous than anyone had ever been before.

长大后，母亲告诉他，如果每天晚上对着月亮唱歌，哥哥就能听到他的声音，于是他就唱啊唱。当电视开始兴起时，他开始在公共场合表演，因此突然之间，他变得比以前任何人都更出名。

Everywhere Elvis went, people would scream, until his world became a chamber of screams. He retreated into a cocoon of his own construction, where he gloried in his possessions in place of his lost freedom. For his mother he bought a palace and named it Graceland.

埃尔维斯所到之处，人们都会尖叫，直到他的世界变成了尖叫声的密室。他退回到自己建造的茧中，在那里他以自己的财产代替失去的自由而自豪。他为母亲买了一座宫殿，并将其命名为格雷斯兰。

I skimmed through the rest – the descent into addiction, the sweating, gurning stage-jammering in Vegas, the death at the age of forty-two. Whenever my godson, who I'll call Adam – I've changed some details here to avoid identifying him – asked questions about how the story ended, I got him to duet 'Blue Moon' with me instead.

我浏览了其余的内容——陷入毒瘾、在维加斯满头大汗、满头大汗的舞台干扰，以及四十二岁时的去世。每当我的教子（我称之为亚当）——我在这里更改了一些细节以避免识别他——询问故事的结局时，我都会让他与我合唱《蓝月亮》。

'You saw me standing alone,' he sang in his little voice, 'without a dream in my heart. Without a love of my own.'

“你看到我孤独地站着，”他用微弱的声音唱道，“我心里没有梦想。”没有我自己的爱。

One day, Adam looked at me very earnestly and asked: ‘Johann, will you take me to Graceland?’ Without really thinking, I agreed. ‘Do you promise? Do you really promise?’ I said I did. And I never gave it another thought, until everything had gone wrong.

有一天，亚当非常认真地看着我，问道：“约翰，你愿意带我去格雷斯兰吗？”我想都没想就答应了。‘你答应吗？你真的答应了吗？’我说我答应了。我再也没有想过这个问题，直到一切都出了问题。



Ten years later, Adam was lost. He had dropped out of school when he was fifteen, and he spent literally almost all his waking hours at home alternating blankly between screens – his phone, an infinite scroll of Whatsapp and Facebook messages, and his iPad, on which he watched a blur of YouTube and porn. At moments, I could still see in him traces of the joyful little boy who sang ‘Viva Las Vegas’, but it was like that person had broken into smaller, disconnected fragments.

十年后，亚当迷路了。他十五岁时就辍学了，几乎所有醒着的时间都呆在家里，茫然地在屏幕之间交替——他的手机、无限滚动的 Whatsapp 和 Facebook 消息，以及他的 iPad，他在上面看到了一些模糊的内容。YouTube 和色情片。有时，我还能在他身上看到那个唱着《拉斯维加斯万岁》的快乐小男孩的痕迹，但那个人就像破碎了更小的、不连贯的碎片。

He struggled to stay with a topic of conversation for more than a few minutes without jerking back to a screen or abruptly switching to another subject. He seemed to be whirring at the speed of Snapchat, somewhere where nothing still or serious could reach him. He was intelligent, decent, kind – but it was like nothing could gain any traction in his mind.

他很难在一个话题上停留超过几分钟，而不会突然回到屏幕或突然切换到另一个话题。他似乎以 Snapchat 的速度旋转着，任何静止或严肃的事物都无法触及他。他聪明、正派、善良——但似乎没有什么能在他的脑海中获得任何牵引力。

During the decade in which Adam had become a man, this fracturing seemed to be happening – to some degree – to many of us.

在亚当成为一个男人的十年里，这种分裂似乎在某种程度上正在发生在我们许多人身上。

The sensation of being alive in the early twenty-first century consisted of the sense that our ability to pay attention – to focus – was cracking and breaking.

生活在二十世纪初的感觉就是我们的注意力——集中注意力——的能力正在崩溃。

I could feel it happen to me – I would buy piles of books, and I would glimpse them guiltily from the corner of my eye as I sent, I told myself, just *one* more tweet. I still read a lot, but with each year that passed, it felt more and more like running up a down escalator.

我能感觉到这种事发生在我身上——我会买成堆的书，当我再发一条推文时，我会用眼角的余光愧疚地瞥见它们，我告诉自己，再发一条推文。我仍然读了很多书，但随着时间的推移，我感觉越来越像跑上自动扶梯。

I had just turned forty, and wherever my generation gathered, we would lament our lost capacity for concentration, as if it was a friend who had vanished one day at sea and never been seen since.

我刚刚四十岁，无论我们这一代人聚集到哪里，我们都会哀叹自己失去了集中注意力的能力，就好像一位朋友有一天在海上消失了，从此再也没有见过。

Then one evening, as we lay on a large sofa, each staring at our own ceaselessly shrieking screens, I looked at Adam and felt a low dread. We can't live like this, I said to myself.

然后有一天晚上，当我们躺在一张大沙发上，每个人都盯着自己不断尖叫的屏幕时，我看着亚当，感到了一种低沉的恐惧。我们不能这样生活，我对自己说。

‘Adam,’ I said softly. ‘Let’s go to Graceland.’

“亚当，”我轻声说道。“我们去格雷斯兰吧。”

‘What?’

‘什么？’

I reminded him of the promise I had made to him so many years before. He couldn't even remember those 'Blue Moon' days, nor my pledge to him, but I could see that the idea of breaking this numbing routine ignited something in him. He looked up at me and asked if I was serious.

我提醒他多年前我对他做出的承诺。他甚至不记得那些“蓝月亮”的日子，也不记得我对他的承诺，但我可以看到，打破这种麻木惯例的想法点燃了他内心的某些东西。他抬头看着我，问我是不是认真的。

‘I am, ‘I said, ‘but there's one condition. I'll pay for us to go four thousand miles. We'll go to Memphis, and New Orleans – we'll go all over the South, anywhere you want. But I can't do it if, when we get there, all you're going to do is stare at your phone.

“我是，”我说，“但有一个条件。”我会支付我们行驶四千英里的费用。我们会去孟菲斯和新奥尔良——我们会去整个南方，任何你想去的地方。但如果当我们到达那里时，你要做的只是盯着手机，我就无法做到这一点。

You have to promise to leave it switched off except at nights. We have to return to reality. We have to reconnect with something that matters to us.’ He swore he would, and a few weeks later, we lifted off from London Heathrow, towards the land of the Delta blues.

你必须保证除了晚上以外都将其关闭。我们必须回到现实。我们必须与对我们重要的事情重新建立联系。”他发誓他会，几周后，我们从伦敦希思罗机场起飞，飞往三角洲蓝调之地。



When you arrive at the gates of Graceland, there is no longer a human being whose job is to show you around. You are handed an iPad, and you put in little earbuds, and the iPad tells you what to do – turn left; turn right; walk forward.

当你到达格雷斯兰的大门时，不再有一个人负责带你参观。有人递给你一个 iPad，你戴上小耳机，iPad 就会告诉你你要做什么——左转；右转；向前行走。

In each room, the iPad, in the voice of some forgotten actor, tells you about the room you are in, and a photograph of it appears on the screen. So we walked around Graceland alone, staring at the iPad.

在每个房间中，iPad 都会以某个被遗忘的演员的声音告诉您您所在的房间，并且屏幕上会出现该房间的照片。于是我们独自在格雷斯兰闲逛，盯着iPad。

We were surrounded by Canadians and Koreans and a whole United Nations of blank-faced people, looking down, seeing nothing around them. Nobody was looking for long at anything but their screens. I watched them as we walked, feeling more and more tense.

我们周围都是加拿大人和韩国人，还有一群面无表情的联合国人，低头看去，周围什么也看不见。除了屏幕之外，没有人长时间注视任何东西。我一边走一边看着他们，心里越来越紧张。

Occasionally somebody would look away from the iPad and I felt a flicker of hope, and I would try to make eye contact with them, to shrug, to say, Hey, we're the only ones looking around, we're the ones who travelled thousands of miles and decided to actually see the things in front of us – but every time this happened, I realised they had broken contact with the iPad only to take out their phones and snap a selfie.

偶尔有人会把目光从 iPad 上移开，我会感到一丝希望，我会尝试与他们进行眼神交流，耸耸肩，说，嘿，我们是唯一环顾四周的人，我们是那些长途跋涉数千英里，决定亲眼看看眼前的事物 - 但每次发生这种情况时，我都意识到他们已经与 iPad 断开了联系，只是拿出手机自拍。

When we got to the Jungle Room – Elvis's favourite place in the mansion – the iPad was chattering away when a middle-aged man standing next to me turned to say something to his wife. In front of us, I could see the large fake pot plants that Elvis had bought to turn this room into his own artificial jungle.

当我们到达丛林屋——猫王在宅邸里最喜欢的地方——iPad 正在喋喋不休时，站在我旁边的一位中年男子转身对他的妻子说了些什么。在我们面前，我可以看到猫王买来大型假盆栽，目的是将这个房间变成他自己的人造丛林。

The fake plants were still there, sagging sadly. ‘Honey,’ he said, ‘this is amazing. Look.’ He waved the iPad in her direction, and then began to move his finger across it. ‘If you swipe left, you can see the Jungle Room to the left.

假植物还在那里，悲伤地下垂。 “亲爱的，”他说，“这太棒了。看。”他朝她的方向挥动 iPad，然后开始在上面移动手指。“如果你向左滑动，你可以看到左边的丛林室。

And if you swipe right, you can see the Jungle Room to the right.’ His wife stared, smiled, and began to swipe at her own iPad.

如果你向右滑动，你可以看到右边的丛林室。”他的妻子凝视着，微笑着，开始在她自己的 iPad 上滑动。

I watched them. They swiped back and forth, looking at the different dimensions of the room. I leaned forward. ‘But, sir,’ I said, ‘there’s an old-fashioned form of swiping you can do. It’s called turning your head. Because we’re here. We’re in the Jungle Room.

我看着他们。他们来回滑动，查看房间的不同尺寸。我向前倾身。“但是，先生，”我说，“你可以采用一种老式的刷卡方式。”这就是所谓的转头。因为我们在这里。我们在丛林室。

You don’t have to see it on your screen. You can see it unmediated. Here. Look.’ I waved my hand at it, and the fake green leaves rustled a little.

您不必在屏幕上看到它。你可以直接看到它。这里。你看。”我向它挥了挥手，假绿叶就发出沙沙的声音。

The man and his wife backed away from me a few inches. ‘Look!’ I said, in a louder voice than I intended. ‘Don’t you see? We’re *there*. We’re *actually there*. There’s no need for your screen. *We are in the Jungle Room.*’ They hurried out of the room, glancing back at me with a who’s-that-loon shake of the head, and I could feel my heart beating fast.

那个人和他的妻子离我后退了几英寸。“看！”我说，声音比我预想的要大。‘你没看到吗？在那里。我们确实在那里。不需要你的屏幕。我们在丛林房间里。’他们匆匆走出房间，回头看了我一眼，摇摇头，我能感觉到我的心跳得很快。

I turned to Adam, ready to laugh, to share the irony with him, to release my anger – but he was in a corner, holding his phone under his jacket, flicking through Snapchat.

我转向亚当，准备大笑，与他分享讽刺，发泄我的愤怒——但他却坐在角落里，把手机藏在夹克下面，快速浏览着 Snapchat。

At every stage in this trip, he had broken his promise. When the plane first touched down in New Orleans two weeks before, he immediately took out his phone, while we were still in our seats. ‘You promised not to use it,’ I said. He replied: ‘I meant I wouldn’t make phone calls.

在这次旅行的每一个阶段，他都违背了自己的诺言。两周前，当飞机首次降落在新奥尔良时，当我们还在座位上时，他立即拿出了手机。“你答应过不使用它的，”我说。他回答说：“我的意思是我不会打电话。

I can’t not use Snapchat and texting, obviously.’ He said this with baffled honesty, as if I had asked him to hold his breath for ten days. I watched him scrolling through his phone in the Jungle Room silently. Milling past him was a stream of people also staring at their screens.

显然，我不能不使用 Snapchat 和发短信。”他带着困惑的诚实说道，就好像我让他屏住呼吸十天一样。我看着他丛林室里默默地刷着手机。从他身边走过的人群也盯着屏幕。

I felt as alone as if I had been standing in an empty Iowa cornfield, miles from another human. I strode up to Adam and snatched his phone from his grasp.

我感到孤独，就好像我站在爱荷华州一片空旷的玉米田里，与另一个人相距数英里。我大步走向亚当，从他手中夺走了他的手机。

‘We can’t live like this!’ I said. ‘You don’t know how to be present! You are missing your life! You’re afraid of missing out – that’s why you are checking your screen all the time! By doing that, you are *guaranteeing* you are missing out! You are missing your one and only life! You can’t see the things that are *right in front of you*, the things you have been longing to see since you were a little boy! None of

these people can! *Look at them!*'

“我们不能这样生活！”我说。‘你不知道如何在场！你错过了你的生活！您害怕错过 – 这就是您一直检查屏幕的原因！通过这样做，你保证你会错过！你正在失去你唯一的生命！你看不到眼前的事物，那些你从小就渴望看到的事物！这些人谁都做不到！看他们！’

I was talking loudly, but in their iPad iSolation, most people around us didn't even notice. Adam snatched his phone back from me, told me (not without some justification) that I was acting like a freak, and stomped away, out past Elvis's grave, and into the Memphis morning.

我大声说话，但在他们的 iPad iSolation 中，我们周围的大多数人甚至没有注意到。亚当从我手中夺回手机，告诉我（并非没有道理）我表现得像个怪胎，然后跺着脚离开，经过埃尔维斯的坟墓，进入孟菲斯的早晨。

I spent hours walking listlessly between Elvis's various Rolls-Royces, which are displayed in the adjoining museum, and finally I found Adam again as night fell in the Heartbreak Hotel across the street, where we were staying.

我花了几个小时无精打采地在猫王的各种劳斯莱斯之间行走，这些劳斯莱斯陈列在毗邻的博物馆里，最后，夜幕降临时，我在我们住的街对面的心碎酒店再次找到了亚当。

He was sitting next to the swimming pool, which was shaped like a giant guitar, and as Elvis sang in a 24/7 loop over this scene, he looked sad.

他坐在形状像一把巨大吉他的游泳池旁边，当埃尔维斯在这一场景中 24/7 循环唱歌时，他看起来很悲伤。

I realised as I sat with him that, like all the most volcanic anger, my rage towards him – which had been spitting out throughout this trip – was really anger towards myself.

当我和他坐在一起时，我意识到，就像所有最激烈的愤怒一样，我对他的愤怒——在这次旅行中一直在吐露——实际上是对自己的愤怒。

His inability to focus, his constant distraction, the inability of the people at Graceland to see the place they had travelled to, was

something I felt rising within myself. I was fracturing like they were fracturing. I was losing my ability to be present too. And I hated it.

他无法集中注意力，他总是分心，格雷斯兰的人们无法看到他们去过的地方，这些都是我内心升起的感觉。我像他们一样骨折了。我也失去了在场的能力。我讨厌它。

‘I know something’s wrong,’ Adam said to me softly, holding his phone tightly in his hand. ‘But I have no idea how to fix it.’ Then he went back to texting.

“我知道出了什么问题，”亚当轻声对我说，手里紧紧地握着手机。“但我不知道如何解决这个问题。”然后他又继续发短信。



I took Adam away to escape our inability to focus – and what I found is that there was no escape, because this problem was everywhere. I travelled all over the world to research this book, and there was almost no respite.

我把亚当带走是为了逃避我们无法集中注意力的问题——但我发现我们无法逃避，因为这个问题无处不在。为了研究这本书，我走遍了世界各地，几乎没有喘息的机会。

Even when I took time out from my research to go to see some of the world’s most famously chill and tranquil places, I found it waiting for me.

即使当我从研究中抽出时间去参观世界上一些最著名的寒冷和宁静的地方时，我也发现它在等着我。

One afternoon, I sat in the Blue Lagoon in Iceland, a vast and infinitely calm lake of geothermal water that bubbles up at the temperature of a hot bathtub even as snow falls all around you.

一天下午，我坐在冰岛的蓝色泻湖里，这是一个巨大而无限平静的地热水湖，即使在你周围下雪的时候，它也会在热水浴缸的温度下冒出气泡。

As I watched the falling snowflakes gently dissolve into the rising steam, I realised I was surrounded by people wielding selfie sticks.

They had put their phones into waterproof casings, and they were frantically posing and posting. Several of them were live-streaming to Instagram. I wondered if the motto for our era should be: I tried to live, but I got distracted. This thought was interrupted by a ripped German, who looked like an influencer, bellowing into his camera phone: ‘Here I am in the Blue Lagoon, living my best life!’

当我看着飘落的雪花轻轻地融入上升的蒸汽时，我意识到我周围都是挥舞着自拍杆的人。他们把手机装进防水壳里，疯狂地摆姿势发帖。其中一些人正在 Instagram 上进行直播。我想知道我们这个时代的座右铭是否应该是：我试图生活，但我分心了。这个想法被一个看起来像网红的德国人打断了，他对着他的拍照手机大吼：“我在蓝色泻湖，过着我最好的生活！”

Another time, I went to see the *Mona Lisa* in Paris, only to find she is now permanently hidden behind a rugby scrum of people from everywhere on earth, all jostling their way to the front, only for them to immediately turn their backs on her, snap a selfie, and fight their way out again.

还有一次，我去巴黎看《蒙娜丽莎》，结果发现她现在永远隐藏在来自世界各地的橄榄球赛人群后面，所有人都挤到前面，结果他们立即背弃了她，拍一张自拍照，然后再一次杀出重围。

On the day I was there, I watched the crowd from the side for more than an hour. Nobody – not one person – looked at the *Mona Lisa* for more than a few seconds. Her smile no longer seems like an enigma.

我去的那天，我在旁边观看了一个多小时的人群。没有人——没有一个人——注视《蒙娜丽莎》超过几秒钟。她的笑容似乎不再是一个谜。

It appears as though she is looking at us from her perch in sixteenth-century Italy and asking us: Why won't you just look at me like you used to?

她似乎在十六世纪意大利的栖息地看着我们，并问我们：你们为什么不再像以前那样看着我？



This seemed to fit with a much wider sense that had been settling on me for several years – one that went well beyond bad tourist habits.

这似乎符合我多年来一直存在的一种更广泛的感觉——一种远远超出不良旅游习惯的感觉。

It felt like our civilisation had been covered with itching powder, and we spent our time twitching and twerking our minds, unable to simply give attention to things that matter. Activities that require longer forms of focus – like reading a book – have been in freefall for years.

感觉就像我们的文明被涂上了止痒粉，我们把时间花在抽搐和扭动我们的头脑上，无法简单地关注重要的事情。需要长时间集中注意力的活动（例如读书）多年来一直呈自由落体状态。

After my trip with Adam, I read the work of the leading scientific specialist on willpower in the world, a man named Professor Roy Baumeister, who is based at the University of Queensland in Australia, and then I went to interview him. He had been studying the science of willpower and self-discipline for more than thirty years, and he is responsible for some of the most famous experiments ever carried out in the social sciences. As I sat down opposite the sixty-six-year-old, I explained I was thinking of writing a book about why we seem to have lost our sense of focus, and how we can get it back. I looked to him hopefully.

与亚当旅行结束后，我读到了世界上意志力领域顶尖科学专家、澳大利亚昆士兰大学罗伊·鲍迈斯特教授的著作，然后我去采访了他。他研究意志力和自律科学已有三十多年，并负责一些社会科学领域有史以来最著名的实验。当我坐在这位六十六岁的老人对面时，我解释说我正在考虑写一本关于为什么我们似乎失去了注意力的书，以及我们如何才能恢复它。我充满希望地看着他。

It was curious, he said, that I should bring up this topic with him. ‘I’m feeling like my control over my attention is weaker than it used to be,’ he said. He used to be able to sit for hours, reading and writing, but now ‘it seems like my mind jumps around a lot more’.

他说，我应该和他提起这个话题，这很奇怪。“我感觉我对注意力的控制力比以前更弱了，”他说。他过去可以一坐几个小时，阅读和写作，但现在“我的思绪似乎跳动得更多了”。

He explained that he had realised recently that ‘when I start to feel

bad, I'd play a video game on my phone, and then that got to be fun'. I pictured him turning away from his enormous body of scientific achievement to play Candy Crush Saga.

他解释说，他最近意识到“当我开始感觉不好时，我会在手机上玩电子游戏，然后那会很有趣”。我想象他放弃了自己巨大的科学成就，去玩《糖果粉碎传奇》。

He said: 'I can see that I am not sustaining concentration in perhaps the way I used to.' He added: 'I'm just sort of giving in to it, and will start to feel bad.'

他说：“我发现我可能无法像以前那样保持注意力集中。”他补充道：“我只是屈服于它，并且会开始感觉不好。”

Roy Baumeister is literally the author of a book named *Willpower*, and he has studied this subject more than anyone else alive. I thought – if even he is losing some of his ability to focus, who isn't it happening to?

罗伊·鲍迈斯特确实是一本名为《意志力》的书的作者，他对这个主题的研究比任何活着的人都多。我想——如果连他都失去了一些集中注意力的能力，谁不是会发生这种情况呢？



For a long time I reassured myself by saying this crisis was really just an illusion.

很长一段时间，我都安慰自己说这场危机实际上只是一种幻觉。

Previous generations felt their attention and focus were getting worse too – you can read medieval monks nearly a millennium ago complaining that they were suffering from attention problems of their own.

前几代人也感到他们的注意力和专注力也变得越来越差——你可以在近千年前读到中世纪的僧侣抱怨他们自己也患有注意力问题。

As human beings get older, they can focus less, and they become convinced that this is a problem with the world and with the next generation, rather than with their own failing minds.

随着人类年龄的增长，他们的注意力会越来越少，他们会相信这是世界和下一代的问题，而不是他们自己失败的思想的问题。

The best way to know for sure would be if scientists, starting years ago, had done something simple. They could have given attention tests to random members of the public, and continued doing the same test for years and decades to track any changes that took place.

确定的最好方法是科学家们从几年前开始就做了一些简单的事情。他们可以对随机的公众进行注意力测试，并持续进行相同的测试数年甚至数十年，以跟踪发生的任何变化。

But nobody did that. That long-term information was never gathered. There is, however, a different way I think we can reach a reasonable conclusion about this. As I researched this book, I learned that there are all sorts of factors that have been scientifically proven to reduce people's ability to pay attention. There is strong evidence that many of these factors have been rising in the past few decades – sometimes dramatically. Against this, there's only one trend I could find that might have been improving our attention.

但没有人这样做。长期信息从未被收集过。然而，我认为我们可以通过另一种方式对此得出合理的结论。当我研究这本书时，我了解到科学证明有各种各样的因素会降低人们的注意力。有强有力的证据表明，其中许多因素在过去几十年中一直在上升——有时甚至是急剧上升。与此相反，我发现只有一种趋势可能会提高我们的注意力。

That's why I came to believe that this is a real crisis, and an urgent one.

这就是为什么我开始相信这是一场真正的危机，而且是一场紧迫的危机。

I also learned that the evidence about where these trends are taking us is stark.

我还了解到，关于这些趋势将我们带向何方的证据是显而易见的。

For example, a small study investigated how often an average American college student actually pays attention to anything, so the scientists involved put tracking software on their computers and monitored what they did in a typical day.

例如，一项小型研究调查了美国大学生平均关注某件事的频率，因此参与研究的科学家在他们的计算机上安装了跟踪软件，并监控他们在一天中所做的事情。

They discovered that, on average, a student would switch task once every sixty-five seconds. The median amount of time they focused on any one thing was just nineteen seconds. If you're an adult and tempted to feel superior, hold off. A different study by Gloria Mark, professor of infomatics at the University of California, Irvine – who I interviewed – observed how long on average an adult working in an office stays on one task. It was three minutes.

他们发现，平均而言，学生每六十五秒就会切换一次任务。他们专注于任何一件事的时间中位数仅为十九秒。如果你是成年人并想获得优越感，请先停下来。加州大学欧文分校信息学教授格洛丽亚·马克（我采访了他）进行了另一项研究，观察了在办公室工作的成年人平均花在一项任务上的时间。三分钟过去了。

So I went on a 30,000-mile journey to find out how we can get our focus and attention back. In Denmark I interviewed the first scientist who has, with his team, shown that our collective ability to pay attention really is rapidly shrinking.

因此，我踏上了 30,000 英里的旅程，寻找如何重新获得注意力的方法。在丹麦，我采访了第一位科学家，他和他的团队表明，我们的集体注意力确实正在迅速萎缩。

Then I met with scientists all over the world who have discovered why. In the end, I interviewed over 250 experts – from Miami to Moscow, from Montreal to Melbourne.

然后我会见了世界各地的科学家，他们发现了原因。最后，我采访了 250 多名专家——从迈阿密到莫斯科，从蒙特利尔到墨尔本。

My quest for answers took me to a crazy mixture of places, from a favela in Rio de Janeiro where attention had shattered in a particularly disastrous way, to a remote office in a small town in New Zealand where they had found a way to radically restore focus.

为了寻找答案，我去了一个疯狂的地方，从里约热内卢的一个贫民窟，那里的注意力以一种特别灾难性的方式崩溃，到新西兰一个小镇的

一个远程办公室，在那里他们找到了一种方法来从根本上恢复重点。

I came to believe that we have profoundly misunderstood what is actually happening to our attention. For years, whenever I couldn't focus, I would angrily blame myself. I would say: You're lazy, you're undisciplined, you need to pull yourself together.

我开始相信我们严重误解了我们所关注的实际情况。多年来，每当我无法集中注意力时，我都会愤怒地责怪自己。我会说：你很懒，你没有自律，你需要振作起来。

Or I would blame my phone, and rage against it, and wish it had never been invented. Most of the people I know respond the same way. But I learned that in fact something much deeper than personal failure, or a single new invention, is happening here.

或者我会责怪我的手机，并对它感到愤怒，并希望它从未被发明出来。我认识的大多数人都有同样的反应。但我了解到，事实上，这里正在发生比个人失败或一项新发明更深刻的事情。

I first began to glimpse this when I went to Portland, Oregon, to interview Professor Joel Nigg, who is one of the leading experts in the world on children's attention problems. He said it might help me grasp what's happening if we compare our rising attention problems to our rising obesity rates. Fifty years ago there was very little obesity, but today it is endemic in the Western world. This is not because we suddenly became greedy or self-indulgent. He said: 'Obesity is not a medical epidemic – it's a social epidemic.

我第一次看到这一点是在我去俄勒冈州波特兰采访乔尔·尼格教授时，他是世界上研究儿童注意力问题的顶尖专家之一。他说，如果我们将日益严重的注意力问题与不断上升的肥胖率进行比较，这可能会帮助我了解正在发生的事情。五十年前，肥胖现象还很少，但如今，肥胖在西方世界却很普遍。这并不是因为我们突然变得贪婪或自我放纵。他说：“肥胖不是一种医学流行病，而是一种社会流行病。

We have bad food, for example, and so people are getting fat.' The way we live changed dramatically – our food supply changed, and we built cities it's hard to walk or bike around – and those changes in our environment led to changes in our bodies.

例如，我们的食物不好，所以人们变得越来越胖。”我们的生活方式发生了巨大的变化——我们的食物供应发生了变化，我们建造了难以步行或骑自行车的城市——而我们环境的这些变化导致了我们的身体。

Something similar, he said, may be happening with the changes in our attention and focus.

他说，随着我们注意力和焦点的变化，可能会发生类似的情况。

He told me that after studying this topic for decades, he believes we need to ask if we are now developing ‘an attentional pathogenic culture’ – an environment in which sustained and deep focus is extremely hard for all of us, and you have to swim upstream to achieve it.

他告诉我，在研究这个话题几十年后，他认为我们需要问一下，我们现在是否正在发展一种“注意力致病文化”——在这种环境中，持续和深度的注意力对我们所有人来说都是极其困难的，你必须游泳上游来实现它。

There’s scientific evidence for many factors in poor attention, he said, and for some people there are some causes that lie in their biology, but he told me we may also need to figure out: ‘Is our society driving people to this point so often, because we have an epidemic [that’s being] caused by specific things that are dysfunctional in our society?’

他说，有科学证据表明注意力不集中的因素有很多，对于某些人来说，他们的生物学有一些原因，但他告诉我，我们可能还需要弄清楚：“我们的社会是否经常迫使人们走到这一步”，因为我们有一种流行病，是由我们社会中功能失调的特定事物引起的？

Later I asked him – if I put you in charge of the world, and you *wanted* to ruin people’s ability to pay attention, what would you do? He thought about it for a moment, and said: ‘Probably about what our society is doing.’

后来我问他，如果我让你来掌管这个世界，而你想毁掉人们的注意力，你会怎么做？他想了想，说道：“可能是我们社会正在做的事情。”

I found strong evidence that our collapsing ability to pay attention is not primarily a personal failing on my part, or your part, or your kid’s part. This is being done to us all. It is being done by very powerful forces.

我发现强有力的证据表明，我们注意力下降的主要原因并不是我、你或你孩子的个人失误。这正在对我们所有人进行。这是由非常强大的力量完成的。

Those forces include Big Tech, but they also go way beyond them. This is a systemic problem.

这些力量包括大型科技公司，但它们也远远超出了它们。这是一个系统性问题。

The truth is that you are living in a system that is pouring acid on your attention every day, and then you are being told to blame yourself and to fiddle with your own habits while the world's attention burns. I realised, when I learned all this, that there is a hole in all the existing books I had read about how to improve your focus. It was huge. They have, in the main, neglected to talk about the actual causes of our attention crisis – which lie mainly in these larger forces.

事实是，你生活在一个每天都在向你的注意力泼酸的系统中，然后你被告知要责备自己，在全世界的注意力都在燃烧的时候去摆弄自己的习惯。当我了解这一切时，我意识到我读过的所有现有关于如何提高注意力的书籍中都存在一个漏洞。它是巨大的。他们基本上忽略了谈论我们注意力危机的真正原因——这主要在于这些更大的力量。

Based on what I learned, I have concluded there are twelve deep forces at work that are damaging our attention. I came to believe we can only solve this problem in the long term if we understand them – and then, together, we stop them from continuing to do this to us.

根据我所了解到的情况，我得出的结论是，有十二种深层力量正在损害我们的注意力。我开始相信，只有理解他们，我们才能长期解决这个问题——然后，我们一起阻止他们继续对我们这样做。

There are real steps you can take as an isolated individual to reduce this problem for yourself, and throughout this book you'll learn how to carry them out. I am strongly in favour of you seizing personal responsibility in this way.

作为一个孤立的个体，你可以采取一些实际的步骤来减少这个问题，在本书中你将学习如何实施这些步骤。我强烈支持你以这种方式承担个人责任。

But I have to be honest with you, in a way that I fear previous books on this topic were not. Those changes will only get you so far. They will solve a slice of the problem. They are valuable. I do them myself.

但我必须对你说实话，我担心以前关于这个主题的书没有做到这一点。这些改变只能让你走到这一步。他们将解决一部分问题。它们很有价值。我自己做。

But unless you are very lucky, they won't allow you to escape the attention crisis. Systemic problems require systemic solutions.

但除非你非常幸运，否则他们不会让你逃脱关注危机。系统性问题需要系统性解决方案。

We have to take individual responsibility for this problem, for sure, but at the same time, together, we have to take collective responsibility for dealing with these deeper factors.

当然，我们必须对这个问题承担个人责任，但与此同时，我们必须共同承担集体责任，处理这些更深层次的因素。

There is a real solution – one that will actually make it possible for us to start to heal our attention. It requires us to radically reframe the problem, and then to take action. I believe I have figured out how we might start to do that.

有一个真正的解决方案——一个真正使我们能够开始治愈我们的注意力的解决方案。它要求我们从根本上重新审视问题，然后采取行动。我相信我已经弄清楚我们如何开始做到这一点。



There are, I think, three crucial reasons why it is worth coming on this journey with me. The first is that a life full of distractions is, at an individual level, diminished. When you are unable to pay sustained attention, you can't achieve the things you want to achieve.

我认为，值得与我一起踏上这段旅程的三个关键原因。首先，在个人层面上，充满干扰的生活会减少。当你无法持续集中注意力时，你就无法实现你想要实现的目标。

You want to read a book, but you are pulled away by the pings and paranoias of social media. You want to spend a few uninterrupted hours with your child, but you keep anxiously checking your email to see if your boss is messaging you.

你想读书，但你被社交媒体的喧嚣和偏执所吸引。您想与孩子一起度过几个不受打扰的时间，但您一直焦急地检查电子邮件，看看老板是否给您发消息。

You want to set up a business, but your life dissolves instead into a blur of Facebook posts that only make you feel envious and anxious. Through no fault of your own, there never seems to be enough stillness – enough cool, clear space – for you to stop and think. A study by Professor Michael Posner at the University of Oregon found that if you are focusing on something and you get interrupted, on average it will take twenty-three minutes for you to get back to the same state of focus. A different study of office workers in the US found most of them *never* get an hour of uninterrupted work in a typical day. If this goes on for months and years, it scrambles your ability to figure out who you are and what you want. You become lost in your own life.

你想创业，但你的生活却消失在 Facebook 的模糊帖子中，这些帖子只会让你感到嫉妒和焦虑。尽管不是你自己的错，但似乎永远没有足够的宁静——足够凉爽、清晰的空间——让你停下来思考。俄勒冈大学迈克尔·波斯纳教授的一项研究发现，如果你正在专注于某件事并且被打扰，那么平均需要二十三分钟才能恢复到同样的专注状态。另一项针对美国办公室工作人员的研究发现，他们中的大多数人在典型的一天中从未获得一小时不间断的工作。如果这种情况持续数月甚至数年，就会扰乱你弄清楚自己是谁以及自己想要什么的能力。你迷失在自己的生活中。

When I went to Moscow to interview the most important philosopher of attention in the world today, Dr James Williams – who works on the philosophy and ethics of technology at Oxford University – he told me: ‘If we want to do what matters in any domain – any context in life – we have to be able to give attention to the right things ... If we can’t do that, it’s really hard to do anything.’ He said that if we want to understand the situation we are in at the moment, it helps to picture something.

当我去莫斯科采访当今世界最重要的哲学家、牛津大学研究技术哲学

和技术伦理的詹姆斯·威廉姆斯博士时，他告诉我：“如果我们想做任何领域中重要的事情— 生活中的任何情况 – 我们必须能够关注正确的事情……如果我们做不到这一点，那就真的很难做任何事情。”他说，如果我们想了解我们所处的情况此刻，它有助于想象一些东西。

Imagine you are driving a car, but somebody has thrown a big bucket of mud all over the windshield. You're going to face a lot of problems in that moment – you are at risk of knocking off your rear-view mirror, or getting lost, or arriving at your destination late.

想象一下，你正在驾驶一辆汽车，但有人把一大桶泥泼在挡风玻璃上。在那一刻你将面临很多问题——你可能会碰掉后视镜，或者迷路，或者迟目的地。

But the first thing you need to do – before you worry about any of those problems – is clean your windshield. Until you do that, you don't even know where you are.

但在担心这些问题之前，您需要做的第一件事就是清洁挡风玻璃。在你这样做之前，你甚至不知道自己在哪里。

We need to deal with our attention problems before we try to achieve any other sustained goal.

在我们尝试实现任何其他持续目标之前，我们需要解决我们的注意力问题。

The second reason we need to think about this subject is that this fracturing of attention isn't just causing problems for us as individuals – it's causing crises in our whole society. As a species, we are facing a slew of unprecedented tripwires and trapdoors – like the climate crisis – and, unlike previous generations, we are mostly not rising to solve our biggest challenges. Why? Part of the reason, I think, is that when attention breaks down, problem-solving breaks down.

我们需要思考这个主题的第二个原因是，这种注意力分散不仅给我们个人带来了问题，而且给我们整个社会带来了危机。作为一个物种，我们面临着一系列前所未有的绊网和陷阱——比如气候危机——而且与前几代人不同的是，我们大多不会奋起解决我们面临的最大挑战。为什么？我认为，部分原因是当注意力分散时，解决问题的能力就会减弱。

Solving big problems requires the sustained focus of many people over many years. Democracy requires the ability of a population to pay attention long enough to identify real problems, distinguish them from fantasies, come up with solutions, and hold their leaders accountable if they fail to deliver them. If we lose that, we lose our ability to have a fully functioning society. I don't think it's a coincidence that this crisis in paying attention has taken place at the same time as the worst crisis of democracy since the 1930s.

解决大问题需要许多人多年来的持续关注。民主要求人民有能力长时间关注，以发现真正的问题，将其与幻想区分开来，提出解决方案，并在领导人未能解决问题时追究其责任。如果我们失去了这一点，我们就失去了建立一个充分运转的社会的能力。这场注意力危机与 20 世纪 30 年代以来最严重的民主危机同时发生，我认为这并非巧合。

People who can't focus will be more drawn to simplistic authoritarian solutions – and less likely to see clearly when they fail. A world full of attention-deprived citizens alternating between Twitter and Snapchat will be a world of cascading crises where we can't get a handle on any of them.

无法集中注意力的人会更容易被简单化的专制解决方案所吸引，而在失败时也不太可能看清楚。一个充斥着注意力被剥夺的公民在 Twitter 和 Snapchat 之间交替使用的世界将是一个危机层出不穷的世界，而我们无法处理其中的任何一个。

The third reason we need to think deeply about focus is, for me, the most hopeful. If we understand what's happening, we can begin to change it.

对我来说，我们需要深入思考专注的第三个原因是最有希望的。如果我们了解正在发生的事情，我们就可以开始改变它。

The writer James Baldwin – the man who is, for my money, the greatest writer of the twentieth century – said: 'Not everything that is faced can be changed, but nothing can be changed until it is faced.' This crisis is human-made, and it can be unmade by us too.

作家詹姆斯·鲍德温 (James Baldwin) ——在我看来，他是二十世纪最伟大的作家——说：“并非所面临的一切都可以改变，但在面对它之前，没有什么可以改变。”这场危机是人类的——我们也可以创造它，也可以取消它。

I want to tell you right at the start how I gathered the evidence I'm going to present to you in this book, and why I selected it.

我想从一开始就告诉你我是如何收集将在这本书中向你展示的证据的，以及我为什么选择它。

In my research, I read a very large number of scientific studies, and then I went to interview the scientists who I thought had gathered the most important evidence. Several different kinds of scientists have studied attention and focus.

在我的研究中，我阅读了大量的科学研究，然后我去采访了我认为收集到最重要证据的科学家。一些不同类型的科学家对注意力和注意力进行了研究。

One group are neuroscientists, and you'll hear from them. But the people who have done the most work on why it is changing are social scientists, who analyse how changes in the way we live affect us, both as individuals, and as groups.

其中一组是神经科学家，您会收到他们的来信。但在这种变化的原因上做最多研究的人是社会科学家，他们分析我们生活方式的变化如何影响我们，无论是作为个人还是作为群体。

I studied social and political sciences at Cambridge University, where I got a rigorous training in how to read the studies these scientists publish, how to assess the evidence they put forward, and – I hope – how to ask probing questions about it.

我在剑桥大学学习社会和政治科学，在那里我接受了严格的培训，了解如何阅读这些科学家发表的研究，如何评估他们提出的证据，以及——我希望——如何提出有关它的探究性问题。

These scientists often disagree with each other about what is happening and why. This isn't because the science is rickety but because humans are extremely complex, and it's really hard to measure something as complicated as what affects our ability to pay attention. This obviously presented a challenge to me as I wrote this book. If we wait for perfect evidence, we will be waiting for ever.

这些科学家对于正在发生的事情及其原因常常意见不一。这并不是因为科学不稳定，而是因为人类极其复杂，而且像影响我们注意力的能力这样复杂的因素确实很难衡量。这显然对我撰写本书提出了挑战。如果我们等待完美的证据，我们将永远等待。

I had to proceed, doing my best, on the basis of the best information we have – while always being conscious that this science is fallible and fragile and needs to be handled with care.

我必须在我们拥有的最好信息的基础上，尽我最大的努力继续前进——同时始终意识到这门科学是容易出错和脆弱的，需要小心处理。

So I have tried, at every stage in this book, to give you a sense of how controversial the evidence I am offering is.

因此，在本书的每个阶段，我都尽力让您了解我提供的证据有多么有争议。

On some of the topics, the subject has been studied by hundreds of scientists, and they have achieved a broad consensus that the points I am going to put forward are correct.

在某些主题上，这个主题已经由数百名科学家进行了研究，他们已经达成了广泛的共识，即我将提出的观点是正确的。

That's obviously the ideal, and wherever it was possible, I sought out scientists who represent a consensus in their field and built my conclusions on the solid rocks of their knowledge.

这显然是理想的，只要有可能，我都会寻找在各自领域代表共识的科学家，并在他们知识的坚实基础上得出我的结论。

But there are some other areas where only a handful of scientists have studied the question I wanted to understand, and so the evidence I can draw on is thinner. There are a few other topics where different reputable scientists strongly disagree about what's really going on.

但在其他一些领域，只有少数科学家研究了我想了解的问题，因此我可以借鉴的证据比较薄弱。对于其他一些话题，不同的知名科学家对于到底发生了什么存在强烈的分歧。

In those cases, I am going to tell you upfront, and try to represent a range of perspectives on the question. At every stage I have tried to build my conclusions on the strongest evidence I could find.

在这些情况下，我将预先告诉您，并尝试代表该问题的一系列观点。在每个阶段，我都试图根据我能找到的最有力的证据来得出结论。

I have tried to always approach this process with humility. I'm not an expert on any of these questions. I'm a journalist, approaching experts, and testing and explaining their knowledge as best I can.

我一直试图以谦虚的态度对待这个过程。我不是这些问题的专家。我是一名记者，接触专家，并尽我所能测试和解释他们的知识。

If you want more detail on these debates, I delve much deeper into the evidence in the more than 400 endnotes I have put on the book's website, discussing the more than 250 scientific studies I have drawn on in this book.

如果你想了解这些争论的更多细节，我会更深入地研究我在本网站上放置的 400 多个尾注中的证据，讨论我在本书中引用的 250 多项科学研究。

I have also sometimes used my own experiences to help explain what I learned. My individual anecdotes obviously aren't scientific evidence. They tell you something simpler: why I wanted to know the answers to these questions so badly.

我有时也会用自己的经历来帮助解释我学到的东西。我的个人轶事显然不是科学证据。他们告诉你一些更简单的事情：为什么我如此想知道这些问题的答案。



When I came back from my trip to Memphis with Adam, I was appalled at myself. One day, I spent three hours reading the same first few pages of a novel, getting lost in distracted thoughts every time, almost as though I was stoned, and I thought – I can't continue like this. Reading fiction had always been one of my greatest pleasures, and losing it would be like losing a limb.

当我和亚当从孟菲斯旅行回来时，我对自己感到震惊。有一天，我花了三个小时读一本小说的前几页，每次都陷入杂念，几乎就像喝醉了一

样，我想——我不能再这样下去了。阅读小说一直是我最大的乐趣之一，失去它就像失去了肢体一样。

So I announced to my friends that I was going to do something drastic.

所以我向我的朋友们宣布我要做一些激烈的事情。

I thought this was happening to me because I wasn't disciplined enough as an individual, and because I had been taken over by my phone. So at the time, I thought the solution was obvious: be more disciplined and banish your phone.

我认为这种情况发生在我身上是因为我作为一个人没有足够的自律，而且因为我已经被手机控制了。所以当时，我认为解决方案是显而易见的：更加自律并放弃使用手机。

I went online and booked myself a little room by the beach in Provincetown, at the tip of Cape Cod. I am going to be there for three months, I announced triumphantly to everyone, with no smartphone, and no computer that can get online. I'm done. I'm through.

我在网上为自己预订了一间位于科德角尖端普罗温斯敦海滩旁的小房间。我要在那里待三个月，我得意洋洋地向大家宣布，没有智能手机，也没有可以上网的电脑。我受够了。我完事了。

For the first time in twenty years, I'm going offline. I talked to my friends about the double meaning of the word 'wired'. It means both being in a manic, hyper mental state, and being online. They seemed to me to be tied together, these twin definitions.

二十年来我第一次离线。我和我的朋友谈论了“有线”这个词的双重含义。它意味着既处于躁狂、亢奋的精神状态，又意味着在线。在我看来，这两个定义是紧密相连的。

I was tired of being wired. I needed to clear my head. And so I did it. I quit. I set up an auto-reply saying I would be unreachable for the next three months. I abandoned the buzz in which I had vibrated for twenty years.

我厌倦了连线。我需要清醒一下头脑。我就这么做了。我不干了。我设置了自动回复，表示在接下来的三个月内无法联系到我。我放弃了让

我振动了二十年的嗡嗡声。

I tried to go into this extreme digital detox without any illusions. I knew this ditching of the entire internet couldn't be a long-term solution for me – I wasn't going to join the Amish and abandon technology for ever.

我试图不抱任何幻想地进行这种极端的数字排毒。我知道放弃整个互联网对我来说不是一个长期的解决方案——我不会加入阿米什人并永远放弃技术。

Even more than that, I knew this approach couldn't even be a short-term solution for most people.

更重要的是，我知道这种方法对于大多数人来说甚至不是一个短期解决方案。

I come from a working-class family – my grandmother, who raised me, cleaned toilets; my dad was a bus driver – and saying to them that the solution to their attention problems would be to quit their jobs and go and live in a shack by the sea would be a spiteful insult: they literally can't do it.

我来自一个工薪阶层家庭——我的祖母抚养我长大，打扫厕所；我父亲是一名公交车司机——如果对他们说，解决注意力问题的办法就是辞去工作，去海边的小屋里生活，这将是一种恶意的侮辱：他们根本做不到。

I did it because I thought that if I didn't, I might lose some crucial aspects of my ability to think deeply. I did it in desperation.

我这样做是因为我认为如果我不这样做，我可能会失去深入思考能力的一些关键方面。我是在绝望中才这么做的。

And I did it because I felt that if I stripped everything back for a time, I might start to be able to glimpse the changes we could all make in a more sustainable way. This drastic digital detox taught me a lot of important things – including, as you'll see, the limits of digital detoxes.

我这样做是因为我觉得如果我暂时剥离一切，我可能会开始看到我们可以以更可持续的方式做出的改变。这种彻底的数字排毒教会了我很多

重要的事情——包括，正如你将看到的，数字排毒的局限性。

It began on a morning in May when I set off for Provincetown, with the glare of the screens of Graceland haunting me. I thought the problem was in my own distractible nature and in our tech, and I was about to give my devices away – freedom, oh freedom! – for a long, long time.

事情始于五月的一个早晨，当时我出发前往普罗温斯敦，格雷斯拉的屏幕的眩光一直萦绕在我的心头。我认为问题出在我自己分心的本性和我们的技术上，我正准备放弃我的设备——自由，哦自由！——很长很长一段时间。

Cause One: The Increase in Speed, Switching and Filtering

1

1 原因一：速度、切换和过滤的提高

‘I don’t understand what you’re asking for,’ the man in Target in Boston kept saying to me. ‘These are the cheapest phones we got. They have super-slow internet. That’s what you want, right?’ No, I said. I want a phone that can’t access the internet at all.

“我不明白你在要求什么，”波士顿塔吉特百货的那个人一直对我说。“这些是我们得到的最便宜的手机。他们的网速超慢。这就是你想要的，对吧？”不，我说。我想要一部根本无法访问互联网的手机。

He studied the back of the box, looking confused. ‘This would be really slow. You could probably get your email but you wouldn’t—’ Email is still the internet, I said. I am going to go away for three months, specifically so I can be totally offline.

他研究着盒子的背面，一脸困惑。‘这真的会很慢。你可能会收到电子邮件，但你不会——’电子邮件仍然是互联网，我说。我要离开三个月，这样我就可以完全离线。

My friend Imtiaz had already given me his old, broken laptop, one that had lost the ability to get online years before. It looked like it came from the set of the original *Star Trek*, a remnant from some aborted vision of the future. I was going to use it, I had resolved, to

finally write the novel I had been planning for years. Now what I needed was a phone where I could be called in emergencies by the six people I was going to give the number to.

我的朋友伊姆蒂亚兹已经给了我他那台破旧的笔记本电脑，这台笔记本电脑几年前就失去了上网的能力。它看起来像是来自原版《星际迷航》的场景，是一些失败的未来愿景的残余物。我决定用它来最终写出我多年来计划的小说。现在我需要的是一部电话，在紧急情况下，我要向其提供号码的六个人可以给我打电话。

I needed it to have no internet option of any kind, so that if I woke up at 3 a.m. and my resolve cracked and I tried to get online, I wouldn't be able to do it, no matter how hard I tried.

我需要它没有任何类型的互联网选项，这样，如果我凌晨 3 点醒来，我的决心崩溃了，我试图上网，无论我多么努力，我都无法做到这一点。

When I explained to people what I was planning, I would get one of three responses. The first was just like that of this man in Target: they couldn't seem to process what I was saying. They thought I was saying that I was going to cut back on my internet use. The idea of going offline completely seemed to them so bizarre that I had to explain it again and again. 'So you want a phone that can't go online *at all*?' he said. 'Why would you want that?'

当我向人们解释我的计划时，我会得到三种回应之一。第一个就像塔吉特百货公司的这个人一样：他们似乎无法理解我所说的话。他们以为我是在说我要减少互联网使用。完全离线的想法对他们来说太奇怪了，我不得不一遍又一遍地解释。“那么你想要一部根本无法上网的手机吗？”他说。“你为什么想要那个？”

The second response – which this man offered next – was a kind of low-level panic on my behalf. 'What will you do in an emergency?' he asked. 'It doesn't seem right.' I asked – what emergency will require me to get online? What's going to happen?

第二个反应——这个人接下来给出的——是我的一种低级恐慌。“遇到紧急情况你会做什么？”他问道。“这似乎不对。”我问道——什么紧急情况需要我上网？会发生什么？

I'm not the President of the United States – I don't have to issue orders

if Russia invades Ukraine. ‘Anything,’ he said. ‘Anything could happen.’ I kept explaining to the people my age – I was thirty-nine at the time – that we had spent half our lives without phones, so it shouldn’t be so hard to picture returning to the way we had lived for so long. Nobody seemed to find this persuasive.

我不是美国总统——如果俄罗斯入侵乌克兰，我不必发布命令。“什么都可以，”他说。“任何事情都有可能发生。”我不断地向我这个年纪的人解释——当时我三十九岁——我们已经在没有手机的情况下度过了半生，所以想象回到我们以前的样子应该不难。活了这么久。似乎没有人认为这有说服力。

And the third response was envy. People began to fantasise about what they would do with all the time they spent on their phones if it was all suddenly freed up.

第三个反应是嫉妒。人们开始幻想，如果他们花在手机上的所有时间突然被解放出来，他们会做什么。

They started by listing the number of hours that Apple’s Screen Time option told them they spent on their phones every day. For the average American, it’s three hours and fifteen minutes. We touch our phones 2,617 times every twenty-four hours.

他们首先列出了苹果屏幕时间选项告诉他们每天花在手机上的时间。对于普通美国人来说，这是三个小时十五分钟。我们每 24 小时触摸手机 2,617 次。

Sometimes they would wistfully mention something they loved and had abandoned – playing the piano, say – and stare off into the distance.

有时，他们会若有所思地提到自己喜欢但放弃的东西——比如弹钢琴——然后凝视远方。

Target had nothing for me. Ironically, I had to go online to order what seemed to be the last remaining cellphone in the United States that can’t access the web. It’s called the Jitterbug. It’s designed for extremely old people, and it doubles as a medical emergency device.

Target 对我来说没有任何东西。讽刺的是，我不得不上网订购似乎是美国最后一部无法访问网络的手机。它被称为“吉特巴”。它是专为老年人设计的，也可作为医疗急救设备。

I opened the box and smiled at its giant buttons and told myself that there's an added bonus: if I fall over, it will automatically connect me to the nearest hospital.

我打开盒子，对着它巨大的按钮微笑，告诉自己还有一个额外的好处：如果我摔倒了，它会自动将我连接到最近的医院。



I laid out on the hotel bed everything I was taking with me. I had gone through all the routine things I normally use my iPhone for, and bought objects to replace each one. So for the first time since I was a teenager, I bought a watch. I got an alarm clock. I dug out my old iPod and loaded it with audiobooks and podcasts, and I ran my finger along its screen, thinking about how futuristic this gadget seemed to me when I bought it twelve years ago; now it looked like something that Noah might have carried onto the Ark.

我把随身携带的所有东西都放在酒店的床上。我已经完成了我通常使用 iPhone 进行的所有日常操作，并购买了一些物品来替换每一件。所以，自从我十几岁的时候起，我第一次买了一块手表。我有一个闹钟。我翻出了我的旧 iPod，在里面装了有声读物和播客，然后用手指抚摸着它的屏幕，想着当我 12 年前买下这个小玩意时，它对我来说是多么的未来主义；现在它看起来像是诺亚可能带到方舟上的东西。

I had Imtiaz's broken laptop – now rendered, effectively, into a 1990s-style word processor – and next to it I had a pile of classic novels I had been meaning to read for decades, with *War and Peace* at the top.

我有 Imtiaz 坏掉的笔记本电脑——现在实际上已经变成了 90 年代风格的文字处理器——旁边有一堆我几十年来一直想读的经典小说，《战争与和平》位于最上面。

I took an Uber so I could hand over my iPhone and my MacBook to a friend who lived in Boston. I hesitated before putting them on the table in her house.

我打了一辆 Uber，这样我就可以把我的 iPhone 和 MacBook 交给一位住在波士顿的朋友。我犹豫了一下才把它们放在她家的桌子上。

Quickly, I pushed a button on my phone to summon a car to take me

to the ferry terminal, and then I switched it off and walked away from it fast, like it might come running after me. I felt a twinge of panic. I'm not ready for this, I thought.

很快，我按下手机上的按钮，召唤一辆车带我去轮渡码头，然后我关掉它，快速走开，就像它可能会追上我一样。我感到一丝恐慌。我想，我还没准备好。

Then somewhere, from the back of my mind, I remembered something the Spanish writer José Ortega y Gasset said: 'We cannot put off living until we are ready ... Life is fired at us point-blank.' If you don't do this now, I told myself, you'll never do it, and you'll be lying on your deathbed seeing how many likes you got on Instagram. I climbed into the car and refused to look back.

然后，在我脑海的某个地方，我想起了西班牙作家何塞·奥尔特加·伊·加塞特说过的话：“我们不能推迟生活，直到我们做好准备……生活会直截了当地向我们开火。”如果你不这样做现在，我告诉自己，你永远不会这样做，你会躺在临终的床上，看看你在 Instagram 上得到了多少赞。我爬进车里，拒绝回头。

I had learned years before from social scientists that when it comes to beating any kind of destructive habit, one of the most effective tools we have is called 'pre-commitment'. It's right there in one of the oldest surviving human stories, Homer's *Odyssey*. Homer tells of how there was once a patch of sea that sailors would always die in, for a strange reason: living in the ocean, there were two sirens – a uniquely hot blend of woman and fish – who would sing to the sailors to join them in the ocean.

多年前，我从社会科学家那里了解到，在克服任何破坏性习惯时，我们拥有的最有效的工具之一就是“预先承诺”。它就出现在现存最古老的人类故事之一——荷马的《奥德赛》中。荷马讲述了曾经有一片大海，水手们总是会死在其中，原因很奇怪：生活在大海里，有两个塞壬——女人和鱼的独特性感组合——她们会唱歌让水手加入。他们在海洋里。

Then, when they clambered in for some sexy fish-based action, they'd drown. But then, one day, the hero of the story – Ulysses – figured out how to beat these temptresses.

然后，当他们爬进去进行一些性感的鱼类动作时，他们就会被淹死。但有一天，故事的英雄——尤利西斯——想出了如何打败这些妖妇。

Before the ship approached the sirens' stretch of sea, he got his crew members to tie him to the mast, hand, hand and foot. He couldn't move. When he heard the sirens, no matter how much Ulysses yearned to dive in, he couldn't.

在船接近海妖的海域之前，他让船员把他的手脚都绑在桅杆上。他无法动弹。当他听到警报声时，无论尤利西斯多么渴望跳入水中，他都做不到。

I had used this technique before when I was trying to lose weight. I used to buy loads of carbs and tell myself I would be strong enough to eat them slowly and in moderation, but then I would guzzle them at 2 a.m. So I stopped buying them. At 2 a.m., I wasn't going to haul myself to a store to buy Pringles.

我以前在尝试减肥时曾使用过这种方法。我过去常常买大量的碳水化合物，告诉自己我会足够强壮，可以慢慢地、适量地吃它们，但后来我会在凌晨 2 点狼吞虎咽，所以我不再买它们。凌晨 2 点，我并不打算费力地去商店买品客薯片。

The you that exists in the present – right now – wants to pursue your deeper goals, and wants to be a better person. But you know you're fallible and likely to crack in the face of temptation. So you bind the future version of you. You narrow your choices.

存在于当下的你想要追求更深层次的目标，想要成为一个更好的人。但你知道自己很容易犯错，并且很可能在诱惑面前崩溃。所以你绑定了未来版本的你。你缩小了选择范围。

You tie yourself to the mast.

你把自己绑在桅杆上。

There has been a small range of scientific experiments to see if this really works, at least in the short term. For example, in 2013 a professor of psychology named Molly Crockett – who I interviewed at Yale – got a bunch of men into a lab and split them into two groups. All of them were going to face a challenge.

已经进行了小范围的科学实验来看看这是否真的有效，至少在短期内是这样。例如，2013 年，一位名叫莫莉·克罗克特 (Molly Crockett) 的心理学教授（我在耶鲁大学采访过她）让一群人进入一个实验室，并将

他们分成两组。他们所有人都将面临挑战。

They were told that they could see a slightly sexy picture right away if they wanted to, but if they were able to wait and do nothing for a little while, they would get to see a super-sexy picture.

他们被告知，如果他们愿意，他们可以立即看到一张稍微性感的照片，但如果他们能够等待一段时间，什么也不做，他们就会看到一张超级性感的照片。

The first group was told to use their willpower, and discipline themselves in the moment. But the second group was given a chance, before they went into the lab, to ‘pre-commit’ – to resolve, out loud, that they were going to stop and wait so they could see the sexier picture.

第一组被告知要运用自己的意志力，并在当下约束自己。但第二组在进入实验室之前有机会“预先承诺”——大声决定他们要停下来等待，这样他们就能看到更性感的照片。

The scientists wanted to know – would the men who made a pre-commitment hold out more often, and longer, than the men who didn’t?

科学家们想知道，那些做出预先承诺的人会比那些没有做出预先承诺的人坚持得更频繁、坚持得更久吗？

It turned out pre-commitment was strikingly successful – resolving clearly to do something, and making a pledge that they’d stick to it, made the men significantly better at holding out. In the years since, scientists have shown the same effect in a broad range of experiments.

事实证明，预先承诺取得了惊人的成功——明确决心要做某事，并承诺他们会坚持下去，这让人们更能坚持下去。此后的几年里，科学家们在广泛的实验中证明了同样的效果。

My trip to Provincetown was an extreme form of pre-commitment, and like Ulysses’ victory, it also began on a boat. As the ferry to Provincetown pulled out, I looked back at Boston Harbour, where the May light was reflecting on the water.

我的普罗温斯敦之行是预先承诺的一种极端形式，就像《尤利西斯》的胜利一样，它也是从船上开始的。当开往普罗温斯敦的渡轮驶离时，我回头看了一眼波士顿港，五月的阳光倒映在水面上。

I stood towards the back of the ship, next to a wet and flapping Stars and Stripes, and watched the foam of the ocean spraying behind us. After about forty minutes, Provincetown slowly appeared on the horizon when I saw the thin spike of the Pilgrim Monument come into view.

我站在船尾，旁边是湿漉漉的、飘动的星条旗，看着我们身后的海洋泡沫在喷射。大约四十分钟后，普罗温斯敦慢慢出现在地平线上，我看到朝圣者纪念碑的细尖映入眼帘。

Provincetown is a long, lush strip of sand where the United States juts into the Atlantic Ocean. It is the last stop in the Americas, the end of the road. You can stand there, the writer Henry David Thoreau said, and feel the whole of the United States at your back. I felt a giddy sense of lightness, and as the beach appeared through the foam, I began to laugh, though I didn't know why. I was almost drunk with exhaustion.

普罗温斯敦是美国伸入大西洋的一条长长的、郁郁葱葱的沙滩。这是美洲的最后一站，路的尽头。作家亨利·大卫·梭罗说，你可以站在那里，感受到整个美国就在你的背后。我感到一阵眩晕的轻盈感，当海滩透过泡沫出现时，我开始笑，尽管我不知道为什么。我几乎累得喝醉了。

I was thirty-nine, and I had been working non-stop since I was twenty-one. I had taken almost no holidays.

我今年三十九岁，从二十一岁起就一直在不停地工作。我几乎没有休假。

I fattened myself with information every waking hour to make myself a more productive writer, and I had started to think that the way I lived was a bit like the process where, in a factory farm, a foie gras goose is force-fed gross amounts in order to turn its liver into pâté.

我每天醒着的时候都用信息来充实自己，让自己成为一个更有生产力的作家，我开始认为我的生活方式有点像在工厂化农场里，一只鹅肝鹅被强行喂食大量的饲料。为了把它的肝脏变成肉酱。

In the previous five years, I had travelled over 80,000 miles, researching, writing and talking about two books.

在过去的五年里，我已经旅行了 80,000 多英里，研究、写作和谈论两本书。

All day, every day, I tried to inhale more information, interview more people, learn more, talk more, and I was now manically skipping between topics, like a record that has been scratched from overuse, and I was finding it hard to retain anything.

整天，每一天，我都试图吸入更多的信息，采访更多的人，了解更多，谈论更多，而我现在却疯狂地在话题之间跳来跳去，就像一张因过度使用而被划伤的唱片，我发现很难保留任何事物。

I had felt tired for so long that all I knew was how to outrun it.

我已经感到疲倦太久了，我只知道如何超越它。

As people began to disembark, I heard the ping of an incoming text message somewhere on the ferry and reached instinctively for my pocket. I felt a panic – where's my phone? – and then remembered, and laughed even more.

当人们开始下船时，我听到渡轮上某处传来短信的提示音，我本能地伸手去掏口袋。我感到一阵恐慌——我的手机呢？——然后想起来，笑得更厉害了。

I found myself thinking, at that moment, about the first time I had ever seen a cellphone. I was around fourteen or fifteen – so this was 1993 or 1994 – and I was on the top deck of the 340 bus in London, coming home from school.

在那一刻，我发现自己在思考我第一次看到手机的情景。当时我大约十四岁或十五岁——那是 1993 年或 1994 年——我在伦敦 340 路公交车的顶层甲板上放学回家。

A man in a suit was talking loudly into an object that in my memory is the size of a small cow. All of us on that top deck turned and looked at him. He seemed to be enjoying us looking, and he talked louder.

一个穿着西装的男人正在对着一个在我记忆中有头小牛那么大的物

体大声说话。我们顶层甲板上的所有人都转过头来看着他。他似乎很喜欢我们的目光，而且说话的声音更大了。

This continued for some time, until another passenger said to him: ‘Mate?’ ‘Yes?’ ‘You’re a wanker.’ And the people on the bus broke the first rule of public transport in London. We looked at each other, and we smiled.

这种情况持续了一段时间，直到另一位乘客对他说：“伙计？”“是吗？”“你是个混蛋。”公交车上的人违反了伦敦公共交通的第一条规则。我们互相看了一眼，都笑了。

These small rebellions were happening all over London, I recall, at the birth of mobile phones. We saw them as an absurd invasion.

我记得，当移动电话诞生时，伦敦各地都发生了这些小叛乱。我们将它们视为荒谬的入侵。

I sent my first email about five years later, when I went to university. I was nineteen years old. I wrote a few sentences, and clicked send, and waited to feel something. No surge of excitement came. I wondered why there was such a fuss about this new email thing.

大约五年后，当我上大学时，我发送了第一封电子邮件。那年我十九岁。我写了几句话，然后点击发送，等待感觉到什么。没有出现任何激动的情绪。我想知道为什么人们对这个新的电子邮件事情如此大惊小怪。

If you had told me then that within twenty years a combination of these two technologies – that seemed initially either repellent or yawnsome – would come to dominate my life to the point where I would have to get on a boat and flee, I would have thought you had lost your mind.

如果你当时告诉我，在二十年内，这两种技术的结合——最初看起来要么令人厌恶，要么令人打哈欠——将主宰我的生活，以至于我不得不上船逃跑，我会想你已经失去理智了。

I tugged my bag off the boat and pulled out the map I had printed from the internet. I hadn’t navigated anywhere without Google Maps in years, but fortunately, Provincetown consists of one long street, so

there are literally only two directions you can give – go left, or go right. I had to go right, to the offices of the estate agent I had rented my sliver of a beachhouse from.

我把包从船上拉下来，拿出从网上打印的地图。我已经很多年没有在没有谷歌地图的情况下导航到任何地方了，但幸运的是，普罗温斯敦由一条长街道组成，所以实际上你只能给出两个方向——向左走，或者向右走。我必须向右走，去我租了一小片海滨别墅的房地产经纪人的办公室。

Commercial Street runs through the middle of Provincetown, and I walked past the neat New England stores selling lobsters and sex toys (these are not the same shops, obviously – that's a niche even Provincetown would shun). I remembered that I chose this place for a few reasons.

商业街穿过普罗温斯敦市中心，我走过整齐的新英格兰商店，出售龙虾和性玩具（显然，这些不是同一家商店——这是连普罗温斯敦都会回避的利基市场）。我记得我选择这个地方有几个原因。

A year before, I had come over for a day from Boston to visit my friend Andrew, who lives there every summer. Provincetown is like a cross between a quaint Cape Cod village in the old New England style, and a sex dungeon.

一年前，我从波士顿过来拜访我的朋友安德鲁，他每年夏天都住在那里。普罗温斯敦就像是古老的新英格兰风格的古色古香的科德角村庄和性地牢的混合体。

For a long time, it was a working-class fishing town populated by Portuguese immigrants and their kids. Then artists started to move in, and it became a Bohemian enclave. Then it became a gay destination.

长期以来，这里是一个工人阶级渔村，居住着葡萄牙移民及其子女。然后艺术家开始搬进来，这里变成了波西米亚飞地。然后它变成了同性恋目的地。

Today it is a place where, in old fisherman's cottages, there now live men whose full-time job is to dress as Ursula, the villain from *The Little Mermaid*, and sing songs about cunnilingus to the tourists who

dominate the town in summer.

如今，在古老的渔民小屋里，住着男人，他们的全职工作就是打扮成《小美人鱼》中的恶棍乌苏拉，向夏天统治小镇的游客唱关于舔阴的歌曲。

I chose Provincetown because I found it charming but not complex – I felt (slightly arrogantly) that I had figured out its essential dynamics in my first twenty-four hours there. I was determined to go to a place that would not trigger my journalistic curiosity too much.

我选择普罗温斯敦是因为我发现它迷人但并不复杂——我觉得（有点傲慢）我在那里的头二十四小时里已经弄清楚了它的本质动态。我决定去一个不会太激发我新闻好奇心的地方。

If I had chosen (say) Bali, I know that I would have soon started trying to figure out how Balinese society worked, and begun interviewing people, and soon I would be back to my manic information-sucking. I wanted a pretty purgatory where I could decompress, and nothing more.

如果我选择（比如说）巴厘岛，我知道我很快就会开始尝试弄清楚巴厘岛社会是如何运作的，并开始采访人们，很快我就会回到疯狂的信息吸收状态。我想要一个漂亮的炼狱，在那里我可以减压，仅此而已。

The estate agent, Pat, drove me out to the beachhouse. It was close to the sea, a forty-minute walk from the centre of Provincetown – almost in the neighbouring town of Truro, in fact. It was a plain wooden house, split into four different apartments. Mine was to the bottom left.

房地产经纪人帕特开车送我去海滨别墅。它靠近大海，距离普罗温斯敦市中心有四十分钟的步行路程——事实上，几乎就在邻近的特鲁罗镇。这是一栋朴素的木屋，分为四间不同的公寓。我的在左下角。

I asked Pat to remove the modem – in case, in some fit of madness, I went and bought an internet-connected device – and to cut off all the cable packages on the television. I had two rooms. Beyond the house, there was a short gravel path, and at the end of it, waiting for me, was the ocean, vast and open and warm.

我要求帕特取下调制解调器——以防万一我一时疯狂，去买了一个联

网设备——并切断了电视上的所有电缆包。我有两个房间。房子外面有一条很短的碎石路，在路的尽头等待着我的大海，广阔、开阔、温暖。

Pat bid me good luck, and I was alone.

帕特祝我好运，而我独自一人。

I unpacked my books and began to flick through them. I couldn't get any traction with the one I picked up. I left it aside and walked over towards the ocean.

我打开书包，开始翻阅它们。我拿起的那本书没有任何吸引力。我把它放在一边，朝海边走去。

It was early in the Provincetown season, and there were only around six other people that I could see for any direction stretching for miles. I felt then a sudden certainty – you only get these feelings a few times in a lifetime – that I had done absolutely the right thing.

当时正值普罗温斯敦季节的早期，我在绵延数英里的任何方向上都只能看到大约六个人。然后我突然确信——你一生中只会有几次这样的感觉——我做了绝对正确的事情。

For so long I had been fixing my gaze on things that were very fast and very temporary, like a Twitter feed. When you fix your gaze on the speedy, you feel pensive, amped up, liable to be washed away if you don't move, wave, shout. Now I found myself staring at something very old and very permanent.

很长一段时间以来，我一直把目光集中在那些非常快、非常临时的事情上，比如 Twitter 上的信息。当你的目光注视着急流时，你会感到沉思、兴奋，如果你不移动、挥手、喊叫，很容易被冲走。现在我发现自己盯着一些非常古老且非常永久的东西。

This ocean was here long before you, I thought, and it will be there long after your small concerns are forgotten. Twitter makes you feel that the whole world is obsessed with you and your little ego – it loves you, it hates you, it's talking about you *right now*. The ocean makes you feel like the world is greeting you with a soft, wet, welcoming indifference. It's never going to argue back, no matter how loud you

yell.

我想，这片海洋早在你之前就已经存在了，而且在你忘记小事之后很久它也会在那里。Twitter 让你感觉整个世界都在为你和你的小自我着迷——它爱你，它恨你，它现在正在谈论你。海洋让你感觉整个世界都在用一种温柔、潮湿、热情的冷漠来迎接你。无论你喊多大声，它都不会反驳。

I stood there for a long time. There was something shocking to me about being so still – to be not scrolling, but static. I tried to remember the last time I had felt like this. I walked down towards Provincetown through the ocean with my jeans rolled up.

我在那里站了很长时间。如此静止让我感到震惊——不是滚动，而是静止。我努力回忆上次有这样的感觉是什么时候。我卷起牛仔裤，穿过海洋朝普罗温斯敦走去。

The water was warm and my feet sank a little into the sand. Little fish swam past and around my pasty white legs. I watched crabs burrow into the sand ahead of me.

水很温暖，我的脚有点陷入沙子里。小鱼游过我苍白的双腿。我看着螃蟹在我前面的沙子里挖洞。

Then, after about fifteen minutes, I saw something so strange that I kept staring at it, and the more I stared, the more confused I became. There was a man standing on the water, out in the middle of the ocean. He was not on a boat, nor on any floating device I could see. But he was far out at sea, and he was standing tall and firm.

然后，大约十五分钟后，我看到了一个很奇怪的东西，我一直盯着它看，越看我就越困惑。有一个人站在海中央的水面上。他不在船上，也不在我能看到的任何漂浮装置上。但他在遥远的海上，却屹立不倒，坚定不移。

I wondered if, in my exhaustion, I had somehow begun to hallucinate. I waved to him; he waved back; and then he turned away, and stood with his palms out, facing the water. He stood there for a long time, and I stood there just as long, watching him.

我想知道，在我精疲力尽的时候，我是否开始产生幻觉了。我向他挥手；他也向我挥手。然后他转过身来，手掌朝外站立，面朝水面。他在

那里站了很长时间，我也站在那里，看着他。

Then he began to walk towards me, seemingly on top of the ocean.

然后他开始向我走来，仿佛在大海之上。

He saw my puzzled expression and explained to me that when the tide comes in in Provincetown, it covers the beach – but what you can't see is that the sand beneath the water is uneven.

他看到我困惑的表情，向我解释说，当普罗温斯敦涨潮时，它会覆盖海滩——但你看不到的是，水下的沙子是不均匀的。

Beneath its surface there are sandbars and islands of raised sand – and if you walk along them, it gives the peculiar impression to anyone watching that you are walking on water.

其表面之下有沙洲和凸起的沙岛，如果您沿着它们行走，会给任何观看您在水上行走的人留下奇特的印象。

I would see this man often after that, as the weeks and months passed, standing out in the Atlantic, his palms facing outwards, still and unmoving for hours. That, I thought to myself, is the opposite of Facebook – standing perfectly still, looking out towards the ocean, with your palms open.

此后，我经常看到这个人，几周又几个月过去了，他站在大西洋上，手掌朝外，几个小时一动不动。我心想，这与 Facebook 相反——一动不动地站着，望着大海，张开手掌。

Eventually I came to my friend Andrew's house. One of his dogs ran to greet me. We strolled down to have dinner together. Andrew had been on a long, silent retreat the year before – no phone, no talking – and he told me to enjoy this sense of bliss, because it wouldn't last long.

最终我来到了我朋友安德鲁的家。他的一只狗跑过来迎接我。我们散步下来一起吃晚饭。安德鲁前一年经历了一次漫长而安静的静修——没有电话，没有说话——他告诉我要享受这种幸福的感觉，因为它不会持续太久。

It's when you set aside your distractions, he said, that you begin to see

what you were distracting yourself from. Oh, Andrew, you're such a drama queen, I said, and we both laughed.

他说，只有当你抛开分心的事情时，你才会开始明白是什么让你分心。哦，安德鲁，你真是个戏剧女王，我说，我们都笑了。

Later, I walked down Commercial Street, past the library, and the town hall, and the AIDS monument, and the cupcake store, and the drag queens handing out flyers for their shows that night, until I heard some singing.

后来，我沿着商业街走，经过图书馆、市政厅、艾滋病纪念碑、纸杯蛋糕店，还有变装皇后为那天晚上的表演分发传单，直到我听到一些歌声。

In a pub, the Crown and Anchor, people were gathered around a piano, singing showtunes. I went in. Together with these strangers, we covered most of the soundtrack of *Evita* and *Rent*. I was struck again by a big difference – between standing in a group of strangers singing with them, and interacting with groups of strangers through screens. The first dissolves your sense of ego; the second jabs and pokes at it. The last song we sang was ‘A Whole New World’.

在 Crown and Anchor 一家酒吧里，人们聚集在钢琴周围，唱着表演曲子。我进去了。我们和这些陌生人一起翻唱了《艾薇塔》和《吉屋出租》的大部分配乐。我再次被一个巨大的差异所震惊——站在一群陌生人中与他们一起唱歌，以及通过屏幕与一群陌生人互动。第一个消除了你的自我意识；第二个消除了你的自我意识。第二次刺戳并戳它。我们唱的最后一首歌是“全新世界”。

I walked back to the beachhouse alone at 2 a.m.

凌晨两点，我独自走回海滨别墅。

I thought about the difference between the glowing blue light I had spent so much of my life staring at, which keeps you always alert, and the natural light that had faded all around me, which seemed to say: the day is over; rest now. The beachhouse was empty.

我想到了我一生中大部分时间都盯着的蓝光，它让你始终保持警觉，与我周围逐渐消失的自然光之间的区别，它似乎在说：一天结束了；一天结束了；一切都结束了。现在休息。海滨别墅空无一人。

There were no texts or voice messages or emails waiting for me – or, if there were, I wouldn't know for three months. I climbed into bed, and I fell into the deepest sleep I could remember. I didn't wake up until fifteen hours later.

没有短信、语音消息或电子邮件在等着我——或者，即使有，我也要三个月后才会知道。我爬上床，陷入了我记忆中最深的睡眠。直到十五个小时后我才醒来。



I spent a week in this haze of decompression, feeling almost stoned with a mixture of exhaustion and stillness. I sat in cafés and talked to strangers. I wandered around the Provincetown library and its three bookstores, picking out yet more books I was going to read.

我在这种减压的迷雾中度过了一周，感觉几乎因疲惫和寂静的混合而昏昏欲睡。我坐在咖啡馆里和陌生人聊天。我在普罗温斯敦图书馆及其三个书店闲逛，挑选了更多我要读的书。

I ate enough lobsters that, if that species ever evolves consciousness, I will be remembered as their Stalin figure, destroying them on an industrial scale. I walked all the way out to the spot where the Pilgrims first arrived on American soil, 400 years before. (They wandered around, couldn't find much, and sailed further down, landing on Plymouth Rock.)

我吃了足够多的龙虾，如果那个物种进化出了意识，我将被铭记为他们的斯大林形象，以工业规模摧毁他们。我一路走到了 400 年前朝圣者首次抵达美国土地的地方。（他们四处闲逛，找不到太多东西，然后继续航行，降落在普利茅斯岩上。）

Strange things started to bubble up into my consciousness. I kept hearing in my head the opening lines of songs from the 1980s and 1990s, when I was a kid, ones I hadn't thought about for years – 'Cat Among the Pigeons' by Bros, or 'The Day We Caught the Train' by Ocean Colour Scene. Without Spotify, I had no way to listen to the songs in full, so I sang them to myself as I walked down the beach. Every few hours, I would feel an unfamiliar sensation gurgling inside me and I would ask myself: What is that? Ah, yes. Calm.

奇怪的事情开始涌入我的意识。我的脑海里不断地响起 20 世纪 80 年

代和 90 年代的歌曲的开场白，当时我还是个孩子，那些我已经很多年没有想过的歌曲了——Bros 的《鸽子中的猫》，或者《我们赶上火车的那一天》”由海洋色彩场景。没有 Spotify，我无法完整聆听这些歌曲，所以我一边走在海滩上一边给自己唱。每隔几个小时，我就会感到一种陌生的感觉在我体内咕咕作响，我会问自己：那是什么？是啊。冷静的。

But all you've done is leave two lumps of metal behind; why does this feel so different? It felt like I had spent years holding two screaming, colicky babies, and now the babies had been handed over to a babysitter, and their screaming and vomiting had vanished from view.

但你所做的只是留下两块金属；为什么感觉如此不同？感觉就像我花了好几年时间抱着两个尖叫、肠绞痛的婴儿，现在婴儿被交给了保姆，他们的尖叫和呕吐已经从视野中消失了。

Everything slowed down for me. Normally I follow the news every hour or so, getting a constant drip-feed of anxiety-provoking factoids and trying to smush it together into some kind of sense. In Provincetown, I could no longer do this. Every morning, I would buy three newspapers and sit down to read them – and then I wouldn't know what happened in the news until the next day.

对我来说一切都变慢了。通常情况下，我每隔一个小时左右就会关注一次新闻，不断地获得一些引起焦虑的事实，并试图将它们拼凑成某种意义。在普罗温斯敦，我不能再这样做了。每天早上，我都会买三份报纸，坐下来阅读——然后直到第二天我才知道新闻里发生了什么。

Instead of a constant blast running all through my waking life, I got one in-depth, curated guide to what happened, and then I could turn my attention to other things.

我醒着的生活中并没有持续不断的爆炸，而是得到了一份深入的、精心策划的指南来了解所发生的事情，然后我可以将注意力转移到其他事情上。

One day, not long after I arrived, a gunman went into a newspaper office in Maryland and murdered five journalists.

有一天，就在我抵达后不久，一名枪手闯入马里兰州一家报社，杀害了五名记者。

As a journalist myself, that's obviously close to my heart, and in my normal life, I would have received texts from my friends as soon as it happened, and then followed it for hours on social media, absorbing garbled accounts, gradually assembling a picture.

作为一名记者，这显然是我的心声，在我的正常生活中，一旦事情发生，我就会收到朋友发来的短信，然后在社交媒体上关注几个小时，吸收乱码账户，逐渐拼凑出一张图片。

In Provincetown, the day after the massacre, I knew within ten minutes all the clear, tragic details I needed to know, from a dead tree.

在普罗温斯敦，大屠杀发生后的第二天，我在十分钟内从一棵枯树上知道了我需要知道的所有清晰、悲惨的细节。

Suddenly, physical newspapers – the very thing this gunman had targeted – seemed to me like an extraordinarily modern invention, and one we all needed. My normal mode of consuming news, I realised, induced panic; this new style induced perspective.

突然间，实体报纸——枪手瞄准的目标——对我来说似乎是一项非常现代的发明，也是我们都需要发明。我意识到，我消费新闻的正常模式会引发恐慌。这种新风格引发的观点。

I felt like something was happening in that first week that was slowly opening my receptors a little – to more attention, to more connection. But what was it?

我觉得第一周发生了一些事情，慢慢地打开了我的感受器——更多的关注，更多的联系。但那是什么？

I only began to understand those first two weeks in Provincetown – and why I felt the way I did – later, when I went to Copenhagen.

后来，当我去了哥本哈根时，我才开始理解在普罗温斯敦的前两周，以及为什么我会有这样的感觉。



Sune Lehmann's sons jumped into his bed, and he knew – with a lurch

in his gut – that there was something wrong. Every morning, his two boys would leap all over him and his wife, excitedly shrieking, glad to be awake for another day.

苏尼·莱曼 (Sune Lehmann) 的儿子们跳上他的床，他内心猛然一动，知道出了什么问题。每天早上，他的两个儿子都会跳到他和他的妻子的身上，兴奋地尖叫，很高兴又能醒来。

It's the kind of scene you picture longingly when you imagine becoming a parent, and Sune adored his sons.

当你想象自己成为父母时，你会渴望看到这样的场景，苏尼很爱他的儿子们。

He knew he should be thrilled by their joy at being awake and alive – but each morning, whenever they appeared, he would instinctively stretch out his hand, not for them, but for something colder.

他知道他应该为他们醒来和活着的喜悦而激动——但每天早上，每当他们出现时，他都会本能地伸出手，不是为了他们，而是为了一些更冷的东西。

‘I would reach over and grab my phone to check my email,’ he told me, ‘even though these amazing, wonderful, sweet creatures are crawling around my bed.’

“我会伸手抓起手机查看电子邮件，”他告诉我，“尽管这些令人惊奇、奇妙、甜蜜的生物在我的床上爬行。”

Every time he thought about it, he felt ashamed.

每每想到这里，他都感到羞愧。

Sune had trained as a physicist, but after a while, he figured he was going to have to investigate – at the Technical University of Denmark, where he is a professor in the Department of Applied Mathematics and Computer Science – what was happening not just in physics, but in himself.

Sune 接受过物理学家培训，但一段时间后，他认为自己必须在丹麦技术大学（他是该大学应用数学和计算机科学系的教授）进行调查，而不

仅仅是在物理，但在他自己身上。

‘I had been obsessed with how I was losing my own ability to focus,’ he told me.

他告诉我，“我一直沉迷于自己如何失去集中注意力的能力。”

‘I was realising that, somehow, I was not able to control my own use of the internet.’ He found himself mindlessly following the small details of events like the US presidential election on social media, hour after hour, achieving nothing.

“我意识到，不知何故，我无法控制自己对互联网的使用。”他发现自己社交媒体上盲目地关注美国总统大选等事件的小细节，一小时又一小时，却一无所获。

This wasn’t just affecting him as a parent, but as a scientist.

这不仅影响了作为父母的他，也影响了作为一名科学家的他。

He says: ‘I came to this realisation that my job in a way is to think something that is different from everyone else – but I was in an environment where I was just getting all the same information as everyone else, and I was just thinking the same things as everyone else.’

”和其他人一样的事情。

He had a sense that the deterioration he was experiencing in his focus was happening to a lot of the people around him – but he also knew that at many points in history, people have thought they were experiencing some kind of disastrous social decline, when in fact, they were merely ageing.

他有一种感觉，他所经历的注意力下降正在发生在他周围的很多人身上——但他也知道，在历史上的许多时刻，人们认为他们正在经历某种灾难性的社会衰退，当在事实上，他们只是变老了。

It’s always tempting to confuse your personal decline for the decline of the human species.

人们总是很容易将个人的衰落与人类物种的衰落混为一谈。

Sune – who was in his late thirties at the time – asked himself: ‘Am I a grumpy old man, or is the world really changing?’ So with scientists across Europe, he launched the largest scientific study yet conducted to answer a key question – is our collective attention span really shrinking?

当时三十多岁的苏尼问自己：“我是一个脾气暴躁的老人，还是世界真的在改变？”因此，他与欧洲各地的科学家一起发起了迄今为止最大规模的科学研究，以回答一个关键问题——我们的集体注意力真的在缩小吗？

As a first step they drew up a list of sources of information that they could analyse. The first and most obvious was Twitter. The site had launched in 2006 and Sune began this work in 2014 – so there was eight years of data to draw on. On Twitter, you can track what topics people are talking about and how long they discuss them for. The team began to do a massive analysis of the data.

作为第一步，他们列出了可以分析的信息来源清单。第一个也是最明显的是 Twitter。该网站于 2006 年推出，Sune 于 2014 年开始这项工作，因此有八年的数据可供利用。在 Twitter 上，您可以跟踪人们正在谈论哪些主题以及他们讨论了多长时间。该团队开始对数据进行大量分析。

How long do people talk about a topic on Twitter for? Has the length of time they focus, collectively, on any one thing changed? Do people talk about the topics that obsess them – the trending hashtags – for more or less time now, compared to in the recent past?

人们在 Twitter 上谈论某个话题的时间有多长？他们共同关注某件事的时间长度是否发生了变化？与最近相比，人们现在谈论令他们着迷的话题——热门话题标签——的时间是否更多或更少？

What they found is that in 2013 a topic would remain in the top fifty most-discussed subjects for 17.5 hours. By 2016 that had dropped to 11.9 hours. This suggested that together, on that site, we were focusing on any one thing for ever-shorter periods of time.

他们发现，2013 年，某个主题在讨论最多的前 50 个主题中停留的时

间为 17.5 小时。到 2016 年，这一时间已降至 11.9 小时。这表明，在该网站上，我们一起专注于任何一件事的时间越来越短。

Okay, they thought, that's striking, but maybe this was a quirk of Twitter. So they started to look at a whole range of other data sets. They looked at what people search for on Google – what's the rate of churn in that? They analysed movie-ticket sales – how long did people carry on going to the cinema to watch a movie after it became a hit? They studied Reddit – how long did topics last there? All the data suggested that, as time passed, we were focusing less on any one individual topic. (The one exception, intriguingly, was Wikipedia, where the level of attention on topics has held steady.) With almost every data set they looked at, the pattern was the same.

好吧，他们想，这很引人注目，但这也可能是 Twitter 的一个怪癖。因此他们开始研究一系列其他数据集。他们研究了人们在谷歌上搜索的内容——其中的流失率是多少？他们分析了电影票销售情况——电影大受欢迎后，人们会继续去电影院看电影多久？他们研究了 Reddit——话题在那里持续了多长时间？所有数据都表明，随着时间的推移，我们对任何一个单独主题的关注都减少了。（有趣的是，唯一的例外是维基百科，其中对主题的关注程度一直保持稳定。）他们查看的几乎每个数据集的模式都是相同的。

Sune said: 'We looked at a lot of different systems ... and we see that in every system, there is an accelerating trend.' It is 'faster to reach peak popularity', and then there is 'a faster drop again'.

苏内说：“我们研究了很多不同的系统……我们发现，在每个系统中，都有一个加速的趋势。”它“更快地达到峰值流行度”，然后“再次更快地下降”。

The scientists wanted to know how long this has been happening for – and that's when they made a really eye-opening discovery. They turned to Google Books, which has scanned the full text of millions of books.

科学家们想知道这种情况发生了多久——就在那时，他们有了一个真正令人大开眼界的发现。他们求助于谷歌图书，它扫描了数百万本书的全文。

Sune and his team decided to analyse books that were written between the 1880s and the present day using a mathematical

technique – the scientific term for it is ‘detecting n-grams’ – that can spot the rise and fall of new phrases and topics in the text.

Sune 和他的团队决定使用数学技术（科学术语是“检测 n 元语法”）来分析 1880 年代至今撰写的书籍，这种技术可以发现新短语和主题的兴趣。文本。

It's the equivalent of finding hashtags from the past. The computers could detect new phrases as they appear – think of, say, ‘the Harlem renaissance’, or ‘no-deal Brexit’ – and they could see how long they were discussed for, and how quickly they faded from discussion.

这相当于寻找过去的主题标签。计算机可以在新短语出现时检测到它们——比如“哈莱姆文艺复兴”或“无协议脱欧”——它们可以看到这些短语被讨论了多长时间，以及它们从讨论中消失的速度有多快。

It was a way of finding out how long the people who came before us talked about a fresh topic for. How many weeks and months did it take for them to get bored and move on the next thing?

这是一种了解前人谈论新话题多久的方法。他们花了多少周和几个月的时间才感到无聊并继续下一件事？

When they looked at the data, they found that the graph looked remarkably similar to Twitter's. With each decade that passed, for more than 130 years, topics have come and gone faster and faster.

当他们查看数据时，发现该图表与 Twitter 的图表非常相似。130多年来，随着时间的推移，话题来得快去得也快。

When he saw the results, Sune told me, he thought: ‘Goddammit, it really is true ... Something is changing. It's not just the same-old, same-old.’ This was the first proof gathered anywhere in the world that our collective attention spans have been shrinking.

苏尼告诉我，当他看到结果时，他想：‘该死，这真的是真的……有些事情正在发生变化。这不仅仅是一成不变的。’这是在世界任何地方收集到的第一个证据，表明我们的集体注意力持续时间正在缩小。

Crucially, this has been happening not just since the birth of the web,

but for the whole of my life, my parents' lives and my grandparents' lives. Yes, the internet had rapidly accelerated the trend – but, crucially, this scientific team had discovered it was not the sole cause.

至关重要的是，这种情况不仅从网络诞生以来就一直在发生，而且在我、我父母和祖父母的一生中都在发生。是的，互联网迅速加速了这一趋势——但至关重要的是，这个科学团队发现这并不是唯一的原因。

Sune and his colleagues wanted to understand what has been driving this change, so they built a complex mathematical model to try to figure it out. It's a bit like the systems that climate scientists construct to successfully predict changes in the weather.

Sune 和他的同事想要了解是什么推动了这种变化，因此他们建立了一个复杂的数学模型来试图找出答案。这有点像气候科学家为成功预测天气变化而构建的系统。

(The full technical details of how they did it, if you're interested, are in their published research.) It was designed to see what you could do to data to make it rise and fall at faster and faster rates in ways that resembled the decline in collective attention they had been documenting.

（如果您感兴趣，他们如何做到这一点的完整技术细节可以在他们发表的研究中找到。）它的目的是看看您可以对数据做些什么，以使其以越来越快的速度上升和下降，其方式类似于他们所记录的集体注意力下降。

What they discovered is that there is one mechanism that can make this happen every time. You just have to flood the system with more information. The more information you pump in, the less time people can focus on any individual piece of it.

他们发现有一种机制可以让这种情况每次都发生。您只需向系统注入更多信息即可。输入的信息越多，人们关注其中任何单个部分的时间就越少。

‘It's a fascinating explanation of why this acceleration is happening,’ Sune told me. Today, ‘There's just more information in the system. So if you think about one hundred years ago, literally it would take time for news to travel.

“这是对为什么会出现这种加速现象的一个令人着迷的解释，”苏内告

诉我。今天，‘系统中有更多信息。因此，如果你想想一百年前，实际上新闻传播需要时间。

If there was some kind of huge catastrophe in a Norwegian fjord, they would have to get up from the fjord down to Oslo, someone would have to write it up,’ and it would slowly wend its way across the globe.

如果挪威峡湾发生某种巨大的灾难，他们就必须从峡湾爬到奥斯陆，必须有人把它写下来，”然后它就会慢慢地传遍全球。

Compare that with the 2019 massacre in New Zealand, when a depraved racist began to murder Muslims in a mosque and it was ‘literally streaming live’, so anyone could watch it, anywhere.

与 2019 年新西兰的大屠杀相比，当时一名堕落的种族主义者开始在清真寺里谋杀穆斯林，而且是“真正的直播”，所以任何人都可以在任何地方观看。

One way of thinking about this, Sune said, is that at the moment, it is like we’re ‘drinking from a fire-hose – there’s too much coming at us’. We are soaked in information. The raw figures on this have been analysed by two other scientists, Dr Martin Hilbert at the University of Southern California and Dr Priscilla López at the Open University of Catalonia. Picture reading an eighty-five-page newspaper. In 1986, if you added up all the information being blasted at the average human being – TV, radio, reading – it amounted to forty newspapers-worth of information every day.

苏尼说，思考这个问题的一种方式，目前，我们就像“从消防水龙带里喝水——有太多的东西向我们袭来”。我们沉浸在信息之中。另外两位科学家，南加州大学的马丁·希尔伯特博士和加泰罗尼亚开放大学的普里西拉·洛佩斯博士对这方面的原始数据进行了分析。想象阅读一份八十五页的报纸。1986 年，如果把普通人收到的所有信息加起来——电视、广播、阅读——每天的信息量就相当于 40 份报纸。

By 2007, they found it had risen to the equivalent of 174 newspapers per day. (I’d be amazed if it hadn’t gone up further since then.) The increase in the volume of information is what creates the sensation of the world speeding up.

到 2007 年，他们发现这一数字已增至相当于每天 174 份报纸。（如果从那时起它没有进一步上升，我会感到惊讶。）信息量的增加创造了世界加速的感觉。

How is this change affecting us? Sune smiled when I asked. ‘There’s this thing about speed that feels great ... Part of why we feel absorbed in this is that it’s awesome, right?’

这一变化对我们有何影响？当我问起时，苏尼笑了。“速度给人一种很棒的感觉……我们之所以沉迷于此，部分原因是它太棒了，对吧？”

You get to feel that you are connected to the whole world, and you feel that anything that happens on the topic, you can find out about it and learn about it.’ But we told ourselves we could have a massive expansion in the amount of information we are exposed to, and the speed at which it hits us, with no costs.

你会感觉自己与整个世界相连，并且感觉与该主题相关的任何事情都可以找到并了解它。”但我们告诉自己，我们可以大规模扩展相关内容的数量。我们接触到的信息以及信息到达我们的速度，而且没有任何成本。

This is a delusion: ‘It becomes exhausting.’ More importantly, Sune said, ‘What we are sacrificing is depth in all sorts of dimensions ... Depth takes time. And depth takes reflection.

这是一种错觉：“这会让人筋疲力尽。”苏尼说，更重要的是，“我们牺牲的是各种维度的深度……深度需要时间。”深度需要反思。

If you have to keep up with everything and send emails all the time, there’s no time to reach depth.

如果您必须跟上一切并一直发送电子邮件，那么就没有时间深入了解。

Depth connected to your work in relationships also takes time. It takes energy. It takes long timespans. And it takes commitment. It takes attention, right? All of these things that require depth are suffering. It’s pulling us more and more up onto the surface.’

与人际关系工作的深度联系也需要时间。它需要能量。需要很长的时

间跨度。这需要承诺。需要注意，对吧？所有这些需要深度的事情都是痛苦。它让我们越来越浮出水面。”

There was a phrase in Sune's scientific paper, summarising his findings, that kept rattling around in my head. It said that we are, collectively, experiencing 'a more rapid exhaustion of attention resources'. When I read this, I realised what I had experienced in Provincetown.

苏恩的科学论文中有一句话总结了他的发现，这句话一直在我的脑海中萦绕。报告称，我们集体正在经历“注意力资源更快耗尽”。当我读到这篇文章时，我意识到我在普罗温斯敦经历了什么。

I was – for the first time in my life – living within the limits of my attention's resources. I was absorbing as much information as I could actually process, think about, and contemplate – and no more. The firehose of information was turned off.

我有生以来第一次生活在注意力资源的限制之内。我吸收了我能实际处理、思考和沉思的尽可能多的信息——仅此而已。信息的火龙被关闭了。

Instead, I was sipping water at the pace I chose.

相反，我按照自己选择的速度喝水。

Sune is a smiling, affable Dane, but when I asked him about how these trends will develop in the future, his body stiffened, and his smile turned to a tight pucker. 'We've been accelerating for a very long time, and for sure, we're getting closer and closer to whatever limits we have,' he said. This acceleration, he said, 'can't continue indefinitely. There's some physical limit to how fast things can move. It must stop at some point. But I don't see any slowing down right now.'

Sune是一个面带微笑、和蔼可亲的丹麦人，但当我问他这些趋势未来将如何发展时，他的身体僵硬了，笑容变成了紧皱的褶子。他说，很长一段时间以来，我们一直在加速发展，当然，我们越来越接近我们的极限。他说，这种加速“不能无限期地持续下去”。事物的移动速度存在一定的物理限制。它必须在某个时刻停止。但我现在没有看到任何放缓的迹象。”

Shortly before I met with him, Sune had seen a photograph of Mark

Zuckerberg, the founder of Facebook, standing in front of a room of people who were all wearing virtual-reality headsets. He was the only person standing in actual reality, looking at them, smiling, pacing proudly around.

在我会见他之前不久，Sune 看到了一张 Facebook 创始人马克·扎克伯格 (Mark Zuckerberg) 的照片，他站在一屋子的人面前，所有人都戴着虚拟现实耳机。他是唯一一个站在现实中的人，看着他们，微笑着，骄傲地走来走去。

When he saw it, Sune said, ‘I was like – holy shit, this is a metaphor for the future.’ If we don’t change course, he fears we are headed towards a world where ‘there’s going to be an upper class of people that are very aware’ of the risks to their attention and find ways to live within their limits, and then there will be the rest of the society with ‘fewer resources to resist the manipulation, and they’re going to be living more and more inside their computers, being manipulated more and more’.

当他看到它时，苏尼说，“我当时想——天哪，这是未来的隐喻。”如果我们不改变路线，他担心我们将走向一个“将会有上层阶级”的世界人们非常清楚自己所面临的风险，并找到了在自己的限度内生活的方法，那么社会上的其他人将拥有更少的资源来抵抗操纵，他们的生活将会更加美好以及更多在他们的计算机中，被越来越多地操纵”。

Once he had learned all this, Sune deeply changed his own life. He stopped using all social media, except Twitter, which he checks only once a week, on Sundays. He stopped watching TV. He stopped getting his news from social media, and instead took out a newspaper subscription. He read many more books instead.

了解这一切后，苏恩深深地改变了自己的生活。他停止使用所有社交媒体，除了 Twitter，他每周只在周日查看一次。他不再看电视了。他不再从社交媒体获取新闻，而是订阅了报纸。相反，他读了更多的书。

‘As you know, everything with self-discipline is not like it’s a thing you fix and then it’s fixed for ever,’ he said. ‘I think the first thing you have to realise is it’s an ongoing battle.’ But he told me it had helped to trigger a philosophical shift in how he approached life.

“如你所知，自律的一切并不像你解决了问题就永远解决了，”他说。“我认为你必须意识到的第一件事是，这是一场持续不断的战斗。”但他

告诉我，这有助于引发他对待生活的哲学转变。

‘In general, we want to take the easy way out, but what makes us happy is doing the thing that’s a little bit difficult.

“总的来说，我们想走简单的路，但让我们快乐的是做有点困难的事情。

What’s happening with our cellphones is that we put a thing in our pocket that’s with us all the time that always offers an easy thing to do, rather than the important thing.’ He looked at me and smiled.

我们手机的情况是，我们把一个东西放在口袋里，一直随身携带，它总是提供简单的事情，而不是重要的事情。”他看着我微笑。

‘I wanted to give myself a chance at choosing something that’s more difficult.’

“我想给自己一个机会选择更困难的事情。”



Sune’s study is pioneering, so it only provides us with a small base of evidence – but, as I dug deeper, I found two related areas of scientific investigation that helped me to understand this more. The first comes, intriguingly, from studies investigating if we can really learn how to speed-read. Several teams of scientists have spent years figuring out – can you make humans read things really, really fast?

Sune的研究是开创性的，所以它只为我们提供了一小部分证据——但是，当我更深入地挖掘时，我发现了两个相关的科学研究领域，这有助于我更多地理解这一点。有趣的是，第一个来自于调查我们是否真的能学会如何快速阅读的研究。几个科学家团队花费了数年的时间来弄清楚——你能让人类真正非常快地阅读东西吗？

They found that you can – but it always comes at a cost. These teams took ordinary people and got them to read much faster than they ordinarily would; with training, and with practice, it sort of works.

他们发现你可以——但这总是要付出代价的。这些团队招募了普通人，让他们的阅读速度比平常快得多。通过训练和实践，它是有效的。

They can run their eyes over the words quickly and retain something of what they are seeing. But if you then test them on what they read, you'll discover that the faster you make them go, the less they will understand. More speed means less comprehension.

他们可以快速浏览单词并记住他们所看到的一些内容。但如果你随后测试他们所读的内容，你会发现你让他们读得越快，他们理解的就越少。更快的速度意味着更少的理解。

Scientists then studied professional speed-readers – and they discovered that even though they are obviously better at it than the rest of us, the same thing happens.

随后，科学家们对专业速读者进行了研究，他们发现，尽管他们的速读能力明显比我们其他人要好，但同样的情况也会发生。

This showed there's just a maximum limit for how quickly humans can absorb information, and trying to bust through that barrier simply busts your brain's ability to understand it instead.

这表明人类吸收信息的速度是有最大限制的，而试图突破这个障碍只会破坏你的大脑理解信息的能力。

The scientists investigating this also discovered that if you make people read quickly, they are much less likely to grapple with complex or challenging material. They start to prefer simplistic statements. After I read this, I looked again at my own habits.

研究这一问题的科学家还发现，如果你让人们快速阅读，他们就不太可能处理复杂或具有挑战性的材料。他们开始喜欢简单的陈述。读完这篇文章后，我再次审视自己的习惯。

When I read a physical newspaper, I'll often be drawn to the stories that I don't understand yet – why, say, is there an uprising in Chile?

当我阅读纸质报纸时，我经常会被那些我还不明白的故事所吸引——比如说，为什么智利会发生起义？

But when I read the same newspaper online, I usually skim those stories, and click on the simpler, more scannable stories related to the

stuff I already know.

但当我在网上阅读同一份报纸时，我通常会浏览这些故事，然后点击与我已经知道的内容相关的更简单、更容易浏览的故事。

After I noticed this, I wondered if in some ways, we are increasingly speed-reading life, skimming hurriedly from one thing to another, absorbing less and less.

当我注意到这一点后，我想，是否在某些方面，我们越来越快读生活，从一件事匆匆浏览到另一件事，吸收的越来越少。

One day, in my webless summer, after slowly reading a book, slowly eating a meal, and slowly wandering around town, I wondered if, in my normal life, I suffer from a kind of mental jet lag.

有一天，在没有网络的夏天，慢慢地看一本书，慢慢地吃一顿饭，慢慢地在城里闲逛，我想，在正常的生活中，我是否患有一种精神时差。

When you fly into a distant time zone, you feel like you've moved too fast and now you are out of sync with the world around you. The British writer Robert Colville says we are living through 'the Great Acceleration', and like Sune, he argues it's not simply our tech that's getting faster – it's almost everything. There's evidence that a broad range of important factors in our lives really are speeding up: people talk significantly faster now than they did in the 1950s, and in just twenty years, people have started to walk 10 percent faster in cities.

当您飞到一个遥远的时区时，您会感觉自己移动得太快，现在与周围的世界不同步。英国作家罗伯特·科尔维尔 (Robert Colville) 表示，我们正在经历“大加速”，与苏恩一样，他认为，不仅仅是我们的技术在变得更快，几乎所有事物都在加速。有证据表明，我们生活中的许多重要因素确实正在加速：人们现在说话的速度比 20 世纪 50 年代快得多，而且在短短 20 年内，人们在城市中的行走速度开始加快 10%。

Usually, this acceleration is sold to us in a spirit of celebration – the original BlackBerry advertising slogan was 'anything worth doing is worth doing faster'. Internally, at Google, their unofficial motto among the staff is 'if you're not fast, you're fucked'.

通常，这种加速是出于庆祝的目的而出售给我们的——最初的黑莓广告口号是“任何值得做的事情都值得做得更快”。在谷歌内部，员工们的非正式座右铭是“如果你不快，你就完蛋了”。

But there's a second way in which scientists have learned how this societal slamming on of the accelerator is affecting our attention. It comes from studying what happens to focus not when we speed up, but when we deliberately slow down.

但科学家们还可以通过第二种方式了解这种社会加速器是如何影响我们的注意力的。它来自于研究当我们加速时而不是当我们故意放慢速度时会发生什么情况。

One of the leading experts on this topic is Guy Claxton, professor of learning sciences at the University of Winchester, who I went to interview in Sussex, in England.

这个话题的顶尖专家之一是温彻斯特大学学习科学教授盖伊·克拉克斯顿（Guy Claxton），我在英国苏塞克斯采访了他。

He has analysed what happens to a person's focus if they engage in deliberately slow practices, like yoga, or tai chi, or meditation, as discovered in a broad range of scientific studies, and he has shown they improve your ability to pay attention by a significant amount.

他分析了如果一个人进行故意缓慢的练习，如瑜伽、太极拳或冥想，正如广泛的科学研究所发现的那样，他的注意力会发生什么变化，他还表明，这些练习可以通过以下方式提高你的注意力能力：数额巨大。

I asked him why. He said that 'we have to shrink the world to fit our cognitive bandwidth'. If you go too fast, you overload your abilities, and they degrade.

我问他为什么。他说“我们必须缩小世界以适应我们的认知带宽”。如果你走得太快，你的能力就会超载，从而降低。

But when you practise moving at a speed that is compatible with human nature – and you build that into your daily life – you begin to train your attention and focus. 'That's why those disciplines make you smarter.

但是，当您练习以符合人性的速度移动时（并将其融入日常生活中），您就开始训练您的注意力和专注力。‘这就是为什么这些纪律会让你变得更聪明。

It's not about humming or wearing orange robes.' Slowness, he explained, nurtures attention, and speed shatters it.

这与哼唱或穿橙色长袍无关。”他解释说，缓慢可以培养注意力，而速度则可以粉碎它。

At some level, in Provincetown, I sensed this was true – so I decided to try these slow practices. The first time I went to see my yoga teacher, Stefan Piscitelli, I said to him: ‘This is going to be like teaching yoga to Stephen Hawking. After his death.’ I explained that I was an immobilised lump of flesh designed only to read, write and occasionally walk.

在某种程度上，在普罗温斯敦，我感觉到这是真的——所以我决定尝试这些缓慢的做法。我第一次去见我的瑜伽老师斯特凡·皮西泰利 (Stefan Piscitelli) 时，我对他说：“这就像向史蒂芬·霍金教瑜伽一样。”他死后。”我解释说，我是一团无法动弹的肉块，只能阅读、写作，偶尔行走。

He laughed and said: ‘We’ll see what we can do.’ And so every day, for an hour, under his guidance, I slowly moved my body in ways I had never done before. At first I found it extraordinarily boring, and I tried to draw Stefan into arguing about politics or philosophy. He would always gently guide me back to trying to move into some weird pretzel shape I had never tried before. By the end of the summer, I was able to be silent for an hour, and to stand on my head.

他笑着说：“我们会看看我们能做些什么。”所以每天，在他的指导下，我用一个小时的时间，以以前从未做过的方式慢慢地移动我的身体。起初我觉得这非常无聊，我试图吸引斯特凡争论政治或哲学。他总是会温柔地引导我重新尝试变成一些我以前从未尝试过的奇怪的椒盐卷饼形状。夏末，我能够保持沉默一个小时，并能倒立。

Afterwards, sometimes with Stefan’s guidance, I would meditate for twenty minutes – a practice I had tried at various points in my life but always let lapse. I felt a kind of slowness spreading through my body.

之后，有时在斯特凡的指导下，我会冥想二十分钟——我在人生的不同阶段尝试过这种练习，但总是失败。我感觉到一种缓慢的感觉在我的身体里蔓延。

I felt my heartbeat slow down, and my shoulders – which are normally in a kind of permanent hunch – relax gently.

我感觉我的心跳减慢了，我的肩膀——通常是一种永久的驼背——轻轻地放松了。

But even when I felt the physical relief from this slowness, it was always followed by a kind of bubbling guilt. I thought – how can I explain this to my sped-up, stressed-out friends back home? How can we all change our lives so we feel more like this?

但即使当我从这种缓慢的状态中感受到身体的放松时，随之而来的总是一种内疚感。我想——我该如何向家乡那些忙碌、压力重重的朋友们解释这一点呢？我们怎样才能改变我们的生活，让我们有更多这样的感觉？

How do you slow down in a world that is speeding up?

在这个加速的世界里，如何放慢脚步？



I started to ask myself an obvious question. If life has accelerated, and we have become overwhelmed by information to the point that we are less and less able to focus on any of it, why has there been so little pushback?

我开始问自己一个显而易见的问题。如果生活已经加速，我们已经被信息淹没，以至于越来越无法集中注意力，为什么很少有阻力呢？

Why haven't we tried to slow things down to a pace where we can think clearly? I was able to find the first part of an answer to this question – and it's only the first part – when I went to interview Professor Earl Miller. He has won some of the top awards in neuroscience in the world, and he was working at the cutting edge of brain research when I went to see him in his office at the Massachusetts Institute of Technology (MIT).

为什么我们不尝试放慢脚步，让我们能够清晰思考？当我去采访厄尔·米勒教授时，我找到了这个问题答案的第一部分——而且只是第一部分。他赢得了世界神经科学领域的一些顶级奖项，当我去他位于麻省理工学院 (MIT) 的办公室见到他时，他正处于大脑研究的前沿。

He told me bluntly that instead of acknowledging our limitations and trying to live within them, we have – en masse – fallen for an enormous delusion.

他直言不讳地告诉我，我们没有承认自己的局限性并努力生活在其中，而是集体陷入了巨大的错觉。

There's one key fact, he said, that every human being needs to understand – and everything else he was going to explain flows from that. 'Your brain can only produce one or two thoughts' in your conscious mind at once. That's it.

他说，每个人都需要理解一个关键事实——他要解释的其他一切都源于此。在你的意识中，“你的大脑一次只能产生一两个想法”。就是这样。

'We're very, very single-minded.' We have 'very limited cognitive capacity'. This is because of the 'fundamental structure of the brain', and it's not going to change. But rather than acknowledge this, Earl told me, we invented a myth. The myth is that we can actually think about three, five, ten things at the same time. To pretend this was the case, we took a term that was never meant to be applied to human beings at all.

“我们非常非常专一。”我们的“认知能力非常有限”。这是因为“大脑的基本结构”，它不会改变。但厄尔告诉我，我们并没有承认这一点，而是发明了一个神话。神话是我们实际上可以同时思考三、五、十件事。为了假装情况确实如此，我们采用了一个根本不适合人类的术语。

In the 1960s, computer scientists invented machines with more than one processor, so they really could do two things (or more) simultaneously. They called this machine-power 'multitasking'. Then we took the concept and applied it to ourselves.

在 20 世纪 60 年代，计算机科学家发明了具有多个处理器的机器，因此它们确实可以同时做两件事（或更多事情）。他们将这种机器能力称为“多任务处理”。然后我们接受了这个概念并将其应用到我们自己身上。

When I first learned about Earl's claim that our ability to think about several things at once is a delusion, I bristled – he couldn't be

right, I thought, because I have done several things at the same time myself. In fact, I do it often.

当我第一次得知厄尔声称我们同时思考几件事的能力是一种错觉时，我感到愤怒——我想他不可能是对的，因为我自己也同时做了几件事。事实上，我经常这样做。

Here's the first example that came to mind: I have checked my email while thinking about the next draft of my book and planning out an interview I was going to do later that day. I did them all from the same toilet seat.

这是我想到的第一个例子：我检查了电子邮件，同时思考我的书的一个草稿，并计划当天晚些时候要进行的采访。我都是在同一个马桶座上完成的。

(I apologise for putting this image in your head.) Where's the fantasy in that?

（我很抱歉把这个形象放在你的脑海里。）这其中的幻想在哪里？

Some scientists used to side with my initial gut instinct – they believed it was possible for people to do several complex tasks at once. So they started to get people into labs, and they told them to do lots of things at the same time, and they monitored how well it went.

一些科学家曾经支持我最初的直觉——他们相信人们可以同时完成多项复杂的任务。因此，他们开始让人们进入实验室，并告诉他们同时做很多事情，并监控其进展情况。

What the scientists discovered is that, in fact, when people think they're doing several things at once, they're actually – as Earl explained – ‘juggling. They're switching back and forth.

科学家发现，事实上，当人们认为自己同时做几件事时，正如厄尔解释的那样，他们实际上是在“杂耍”。他们来回切换。

They don't notice the switching because their brain sort of papers it over, to give a seamless experience of consciousness, but what they're actually doing is switching and reconfiguring their brain moment to moment, task to task – [and] that comes with a cost.'

他们没有注意到这种切换，因为他们的大脑有点把它掩盖起来，以提供无缝的意识体验，但他们实际上所做的是每时每刻、任务到任务地切换和重新配置他们的大脑 - [and]有成本。

There are three ways, he explained, in which this constant switching degrades your ability to focus. The first is called the switch cost effect. There is broad scientific evidence for this.

他解释说，这种不断的切换会通过三种方式降低你的注意力集中能力。第一个称为转换成本效应。有广泛的科学证据证明这一点。

Imagine you are doing your tax return and you receive a text, and you look at it – it's only a glance, taking five seconds – and then you go back to your tax return. In that moment, 'Your brain has to reconfigure, when it goes from one task to another,' he said.

想象一下，您正在做纳税申报表，收到一条短信，您看了一下它 - 只需一眼，只需五秒钟 - 然后您返回纳税申报表。在那一刻，“当你的大脑从一项任务转到另一项任务时，它必须重新配置，”他说。

You have to remember what you were doing before, and you have to remember what you thought about it, 'and that takes a little bit of time'. When this happens, the evidence shows that 'your performance drops. You're slower. All as a result of the switching.'

你必须记住你之前在做什么，你必须记住你对此的想法，“这需要一点时间”。当这种情况发生时，有证据表明“你的表现会下降”。你比较慢。这一切都是切换的结果。

So if you check your texts often while trying to work, you aren't only losing the little bursts of time you spend looking at the texts – you are also losing the time it takes to refocus afterwards, which can be much longer.

因此，如果你在工作时经常检查文本，你不仅会浪费掉花在查看文本上的短暂时间，还会浪费事后重新集中注意力所需的时间，而这个时间可能会更长。

He said: 'If you're spending a lot of your time not really thinking, but wasting it on switching, that's just wasted brain-processing time.' This means that if your Screen Time shows you are using your phone four hours a day, you are losing much more time than that in lost focus.

他说：“如果你花了很多时间没有真正思考，而是浪费在切换上，那就只是浪费了大脑处理时间。”这意味着，如果你的屏幕时间显示你每天使用手机四个小时，你失去的时间比失去注意力要多得多。

When Earl said this, I thought – yes, but it must be a small effect, a tiny drag on your attention. But when I went and read the relevant research, I learned there is some science suggesting the effect can be surprisingly large. For example, a small study commissioned by Hewlett-Packard looked at the IQ of some of their workers in two situations. At first they tested their IQ when they were not being distracted or interrupted. Then they tested their IQ when they were receiving emails and phone calls.

当厄尔说这句话时，我想——是的，但这一定是一个很小的影响，对你注意力的一个微小的拖累。但当我去阅读相关研究时，我了解到有一些科学表明这种影响可能大得惊人。例如，惠普委托进行的一项小型研究考察了一些员工在两种情况下的智商。起初，他们在没有受到干扰或干扰的情况下测试了自己的智商。然后，他们在收到电子邮件和电话时测试了自己的智商。

The study found that ‘technological distraction’ – just getting emails and calls – caused a drop in the workers’ IQ by an average of ten points. To give you a sense of how big that is: in the short term, that’s twice the knock to your IQ that you get when you smoke cannabis.

研究发现，“技术干扰”——仅仅收到电子邮件和电话——导致员工的智商平均下降十个百分点。让你感受一下这有多大：在短期内，你的智商受到的影响是吸食大麻时的两倍。

So this suggests in terms of being able to get your work done, you’d be better off getting stoned at your desk than checking your texts and Facebook messages a lot.

因此，这表明，就能够完成工作而言，你最好在办公桌前喝醉，而不是经常检查你的短信和 Facebook 消息。

From there, the research shows, it gets worse. The second way switching harms your attention is what we might call the screw-up effect.

研究表明，从那时起，情况会变得更糟。第二种损害你注意力的方式就是我们所说的“搞砸效应”。

When you switch between tasks, errors that wouldn't have happened otherwise start to creep in, because – Earl explained – ‘your brain is error-prone.

当你在任务之间切换时，本来不会发生的错误就会开始出现，因为——厄尔解释说——“你的大脑很容易出错。”

When you switch from task to task, your brain has to backtrack a little bit and pick up and figure out where it left off – and it can't do that perfectly. Glitches start to occur.

当你从一个任务切换到另一个任务时，你的大脑必须回溯一下，然后重新开始并找出它停止的地方”——但它不能完美地做到这一点。故障开始出现。

‘Instead of spending critical time really doing deep thinking, your thinking is more superficial, because you're spending a lot of time correcting errors and backtracking.’

“你的想法不是花关键时间真正进行深入思考，而是更加肤浅，因为你花了很多时间纠正错误和回溯。”

Then there's a third cost to believing you can multitask, one that you'll only notice in the medium or longer term – which we might call the creativity drain. You're likely to be significantly less creative. Why?

然后，相信自己可以同时处理多项任务还有第三个成本，这个成本只有在中长期内才会注意到——我们可以称之为创造力流失。你的创造力可能会大大降低。为什么？

‘Because where do new thoughts [and] innovation come from?’ Earl asked. They come from your brain shaping new connections out of what you've seen and heard and learned.

“因为新思想[和]创新从哪里来？”厄尔问道。它们来自你的大脑，根据你所看到、听到和学到的东西塑造新的联系。

Your mind, given free undistracted time, will automatically think back

over everything it absorbed, and it will start to draw links between them in new ways.

如果你的大脑有自由、不受干扰的时间，它会自动回想它所吸收的一切，并开始以新的方式在它们之间建立联系。

This all takes place beneath the level of your conscious mind, but this process is how ‘new ideas pop together, and suddenly, two thoughts that you didn’t think had a relationship suddenly have a relationship’. A new idea is born.

这一切都发生在你的意识层面之下，但这个过程就是“新的想法突然出现在一起，突然间，两个你认为没有关系的想法突然之间有了关系”。一个新的想法诞生了。

But if you ‘spend a lot of this brain-processing time switching and error-correcting’, Earl explained, you are simply giving your brain less opportunity to ‘follow your associative links down to new places and really [have] truly original and creative thoughts’.

但厄尔解释说，如果你“花费大量大脑处理时间进行切换和纠错”，那么你的大脑就没有机会“沿着你的联想链接到达新的地方，并真正具有原创性和创造性”。的想法’。

I later learned about a fourth consequence, based on a smaller amount of evidence – which we might call the diminished memory effect. A team at UCLA got people to do two tasks at once, and tracked them to see the effects.

后来我基于较少的证据了解到了第四个结果——我们可以称之为记忆减弱效应。加州大学洛杉矶分校的一个团队让人们同时完成两项任务，并跟踪他们以查看效果。

It turned out that afterwards they couldn’t remember what they had done as well as people who did just one thing at a time.

事实证明，事后他们不记得自己做过什么，就像一次只做一件事的人一样。

This seems to be because it takes mental space and energy to convert your experiences into memories, and if you are spending your energy

instead on switching very fast, you'll remember and learn less.

这似乎是因为将你的经历转化为记忆需要心理空间和精力，如果你把精力花在快速切换上，你会记得和学到的东西更少。

So if you spend your time switching a lot, then the evidence suggests you will be slower, you'll make more mistakes, you'll be less creative, and you'll remember less of what you do. I wanted to know: how often are most of us engaging in switching like this? Professor Gloria Mark, at the Department of Infomatics at the University of California, Irvine, who I interviewed, has discovered that the average American worker is distracted roughly once every three minutes.

因此，如果你花费大量时间进行切换，那么有证据表明你会变得更慢，你会犯更多的错误，你的创造力会降低，并且你会记得更少的事情。我想知道：我们大多数人多久会进行一次这样的转换？我采访过的加州大学欧文分校信息学系的格洛丽亚·马克教授发现，普通美国工人大约每三分钟就会分心一次。

Several other studies have shown a large chunk of Americans are almost constantly being interrupted and switching between tasks. The average office worker now spends 40 percent of their work time wrongly believing they are 'multitasking' – which means they are incurring all these costs for their attention and focus.

其他几项研究表明，很大一部分美国人几乎经常被打扰并在任务之间切换。现在，办公室职员平均花费 40% 的工作时间，错误地认为自己在“同时处理多项任务”——这意味着他们要为注意力和专注力付出所有这些成本。

In fact, uninterrupted time is becoming rare: one study found that most of us working in offices never get a whole hour uninterrupted in a normal day. I had to look again at that figure several times before I really absorbed it: most office workers *never* get an hour to themselves without being interrupted. This is happening at every level of businesses – the average CEO of a Fortune 500 company, for example, gets just twenty-eight uninterrupted minutes a day.

事实上，不受干扰的时间变得越来越少：一项研究发现，我们大多数人在办公室工作，在正常的一天里从来没有一小时不受干扰的时间。在我真正理解它之前，我不得不多次审视这个数字：大多数办公室工作人员从来没有一个小时独处而不被打扰。这种情况发生在企业的各个层面

——例如，财富 500 强公司的首席执行官平均每天只有 28 分钟不间断的工作时间。

Whenever this problem is talked about in the media, it's described as 'multitasking' – but I think using this old computing term is a mistake.

每当媒体谈论这个问题时，它都会被描述为“多任务处理”——但我认为使用这个旧的计算术语是一个错误。

When I picture multitasking, I picture a 1990s single mother trying to feed a baby while also taking a work call and preventing the food she's cooking from catching fire.

当我想象多任务处理时，我会想象一位 20 世纪 90 年代的单身母亲一边一边喂孩子，一边接工作电话，并防止她正在做饭的食物着火。

(I watched a lot of bad sitcoms in the 1990s.) I don't picture somebody taking a work call while also checking their text messages.

（我在 20 世纪 90 年代看过很多糟糕的情景喜剧。）我无法想象有人一边接工作电话一边查看短信。

We now use our phones so habitually that I don't think we consider doing a task and checking our phones at the same time as multitasking, any more than we think scratching your butt during a work call is multitasking. But it is.

我们现在已经习惯性地使用手机，以至于我不认为我们会考虑在执行任务的同时查看手机作为多任务处理，就像我们认为在工作通话期间挠屁股是多任务处理一样。但它是。

Simply having your phone switched on and receiving texts every ten minutes while you try to work is itself a form of switching – and these costs start to kick in for you too. One study at the Carnegie Mellon University's Human Computer Interaction Lab took 136 students and got them to sit a test. Some of them had to have their phones switched off, and others had their phones on and received intermittent text messages.

在您尝试工作时，打开手机并每十分钟接收一次短信本身就是一种转

换形式，而这些成本也开始对您产生影响。卡内基梅隆大学人机交互实验室的一项研究对 136 名学生进行了测试。他们中的一些人不得不关闭手机，另一些人则打开手机并收到断断续续的短信。

The students who received messages performed, on average, 20 percent worse. Other studies in similar scenarios have found even worse outcomes of 30 percent. It seems to me that almost all of us with a smartphone are losing that 20 to 30 percent, almost all the time.

收到消息的学生的平均表现要差 20%。其他针对类似情况的研究发现，结果甚至更差 30%。在我看来，几乎所有拥有智能手机的人都在损失 20% 到 30% 的电量，而且几乎一直如此。

That's a lot of brainpower for a species to lose.

对于一个物种来说，失去大量的脑力。

If you want to understand how much harm this does, Earl told me, just look at one of the fastest rising causes of death in the world: distracted driving. The cognitive neuroscientist Dr David Strayer at the University of Utah conducted detailed research where he got people to use driving simulators and tracked how safe their driving was when they were distracted by technology – something as simple as their phone receiving texts. It turned out their level of impairment was ‘very similar’ to if they were drunk.

厄尔告诉我，如果你想了解这会造成多大危害，只需看看世界上上升最快的死亡原因之一：分心驾驶。犹他大学的认知神经科学家大卫·斯特雷耶博士进行了详细的研究，他让人们使用驾驶模拟器，并跟踪他们在被技术（就像手机接收短信一样简单）分心时驾驶的安全程度。事实证明，他们的损伤程度与醉酒时“非常相似”。

It's worth dwelling on that: persistent distractions have as bad an effect on your attention on the road as consuming so much alcohol that you got drunk.

值得深思的是：持续的分心对你在路上的注意力的影响就像喝醉了酒一样糟糕。

The distraction all around us isn't just annoying, it's deadly: around

one in five car accidents is now due to a distracted driver.

我们周围的分心不仅令人烦恼，而且是致命的：现在大约五分之一的车祸是由于驾驶员分心造成的。

The evidence is clear, Earl told me: there's no alternative, if you want to do things well, to focusing carefully on one thing at a time.

厄尔告诉我，证据很清楚：如果你想把事情做好，就没有其他选择，只能一次仔细地专注于一件事。

As I learned all this, I realised that my desire to absorb a tsunami of information without losing my ability to focus was like my desire to eat at McDonald's every day and stay trim – an impossible dream. The size and capacity of the human brain hasn't significantly changed in 40,000 years, Earl explained, and it isn't going to upgrade any time soon. Yet we are deluded about this fact. Dr Larry Rosen, a professor of psychology at California State University, discovered that the average teen and young adult genuinely believes they can follow six or seven forms of media at once. We are not machines. We cannot live by the logic of machines.

当我了解到这一切时，我意识到我渴望吸收海量的信息而不失去集中注意力的能力，就像我渴望每天在麦当劳吃饭并保持苗条一样——这是一个不可能实现的梦想。厄尔解释说，四万年来，人类大脑的大小和容量没有发生显著变化，而且不会很快升级。然而我们对这个事实感到迷惑。加州州立大学心理学教授拉里·罗森博士发现，普通青少年和年轻人确实相信他们可以同时关注六七种媒体形式。我们不是机器。我们不能按照机器的逻辑生活。

We are humans, and we work differently.

我们是人类，我们的工作方式不同。

When I learned all this, I realised another crucial reason why I had felt so good – and so mentally restored – in Provincetown. For the first time in a long time, I was allowing myself to focus on one thing at a time for long stretches.

当我了解到这一切后，我意识到了另一个重要原因，为什么我在普罗温斯敦感觉如此良好，精神如此恢复。很长一段时间以来，我第一次允许自己长时间专注于一件事。

It felt like I had had an enormous boost in my mental capacity – because I was respecting my mind’s limitations. I asked Earl if, given what we know about the brain, it was fair to conclude that attention problems today really are worse than at some points in the past.

感觉我的心智能力得到了巨大的提升——因为我尊重自己思维的局限性。我问厄尔，根据我们对大脑的了解，是否可以公平地得出这样的结论：今天的注意力问题确实比过去的某些时候更严重。

He replied: ‘Absolutely.’ We have, he believes, created in our culture ‘a perfect storm of cognitive degradation, as a result of distraction’.

他回答说：“当然。”他相信，我们的文化中“由于分心而引发了一场认知退化的完美风暴”。

This was hard to take on board. It’s one thing to have a hunch that there’s a crisis. It’s another thing to hear one of the leading neuroscientists in the world tell you we are living in a ‘perfect storm’ that’s degrading your capacity to think.

这很难接受。预感存在危机是一回事。听到世界上一位领先的神经科学家告诉你我们正生活在一场“完美风暴”中，这会降低你的思考能力，这是另一回事。

‘The best we can do now,’ Earl had told me, ‘is try to get rid of the distractions as much as possible.’ At one point in our conversation, he sounded quite optimistic, suggesting that we can all achieve progress on this, starting today. He said: ‘The brain is like a muscle.

“我们现在能做的最好的事情，”厄尔告诉我，“就是尽可能地摆脱干扰。”在我们谈话的某个时刻，他听起来相当乐观，暗示我们都可以在这方面取得进展。，从今天开始。他说：“大脑就像肌肉。

The more you use certain things, the stronger the connection’s getting, and the better things work.’ If you are struggling to focus, he says, just try monotasking for ten minutes, and then allow yourself to be distracted for a minute, then monotask for another ten minutes, and so on.

你使用某些东西越多，联系就越牢固，事情就越好。”他说，如果你很难集中注意力，那就尝试单一任务处理十分钟，然后让自己分心一分

钟，然后再单一任务处理再过十分钟，依此类推。

‘As you do it, it becomes more familiar, your brain gets better and better at it, because you’re strengthening the [neural] connections involved in that behaviour. And pretty soon you can do it for fifteen minutes, twenty minutes, half an hour, you know? ... Just do it.

“当你这样做时，它会变得更加熟悉，你的大脑会变得越来越擅长，因为你正在加强与该行为有关的[神经]连接。很快你就可以做十五分钟、二十分钟、半小时，你知道吗？... 去做就对了。

Practise at it ... Start slow, but practise, and you’ll get there.’

练习.....慢慢开始，但是练习，你就会到达目的地。

To achieve this, he says you have to separate yourself – for increasing periods of time – from the sources of your distraction. It’s a mistake, he said, to ‘try to monotask by force of will – because it’s too hard to resist that informational tap on the shoulder’.

他说，为了实现这一目标，你必须在更长的时间内将自己与分心的来源分开。他说，“试图依靠意志力来完成单一任务是错误的——因为很难抗拒信息上的轻拍”。

When I asked him about how, as a society, we could find a way to do this, he told me that he’s not a sociologist, and I’d have to look elsewhere for answers to that.

当我问他，作为一个社会，我们如何找到一种方法来做到这一点时，他告诉我，他不是社会学家，我必须到其他地方寻找答案。



Our brains are not only overloaded now with switching – I learned they are also overloaded with something else. Adam Gazzaley, who is a professor of neurology, physiology and psychiatry at the University of California, helped me to understand it when I sat down with him in a coffee shop in San Francisco.

我们的大脑现在不仅因切换而超负荷——我了解到它们还因为其他东西而超负荷。加州大学神经学、生理学和精神病学教授亚当·加扎利 (Adam Gazzaley) 在旧金山的一家咖啡馆里与他坐在一起，帮助我理解了这一

点。

He explained that you should think of your brain as like a nightclub where, standing at the front of that club, there's a bouncer.

他解释说，你应该把你的大脑想象成一家夜总会，夜总会前面有一个保镖。

The bouncer's job is to filter out most of the stimuli that are hitting you at any given moment – the traffic noise, the couple having an argument across the street, the cellphone ringing in the pocket of the person next to you – so that you can think coherently about one thing at a time.

保镖的工作是过滤掉任何特定时刻对你造成的大部分刺激——交通噪音、街对面的情侣争吵、你旁边的人口袋里的手机铃声——这样你就可以一次连贯地思考一件事。

The bouncer is essential: this ability to filter out irrelevant information is crucial if you are going to be able to attend to your goals. And that bouncer in your head is strong and ripped: he can fight off two, four, maybe even six people trying to barge into your brain at a time. He can do a lot. The part of your brain doing this is known as the prefrontal cortex.

保镖是必不可少的：如果您想要实现自己的目标，过滤掉不相关信息的能力至关重要。你脑子里的那个保镖很强大而且很厉害：他可以一次击退两个、四个、甚至六个试图闯入你大脑的人。他可以做很多事情。大脑中执行此操作的部分称为前额叶皮层。

But today, Adam believes, the bouncer is besieged in an unprecedented way. In addition to switching tasks like never before, our brains are also being forced to filter more frantically than at any point in our past. Think about something as simple as noise.

但亚当相信，今天保镖正以前所未有的方式被围困。除了以前所未有的方式切换任务外，我们的大脑还被迫比过去任何时候都更加疯狂地进行过滤。考虑像噪音这样简单的事情。

There's broad scientific evidence that if you are sitting in a noisy room, your ability to pay attention deteriorates, and your work gets

worse. For example, children in noisy classrooms have worse attention than kids in quiet classrooms. Yet many of us are surrounded by high levels of noise, working in open-plan offices, sleeping in crowded cities, and tapping away on our laptops in crammed coffee shops like the one we were sitting in at that moment.

有广泛的科学证据表明，如果你坐在一个吵闹的房间里，你的注意力就会下降，你的工作也会变得更糟。例如，吵闹教室里的孩子比安静教室里的孩子注意力更差。然而，我们中的许多人都被高强度的噪音所包围，在开放式办公室工作，在拥挤的城市睡觉，在拥挤的咖啡店里敲着腿，就像我们当时坐在那家咖啡店一样。

Rising noise pollution is just one example – we live surrounded by shrieking distractions calling for our attention, and the attention of others. That’s why, Adam said, the bouncer has to work ‘way harder’ to keep out distractions. He’s exhausted.

不断加剧的噪音污染只是一个例子——我们生活在各种令人分心的事物中，这些事物需要我们的注意力，也需要其他人的注意力。亚当说，这就是为什么保镖必须“更加努力”地工作以排除干扰。他已经筋疲力尽了。

And so a lot more is fighting its way past him, into your mind – interfering with the flow of your thoughts.

因此，更多的东西正在越过他，进入你的思想——干扰你的思想流动。

As a result, a lot of the time, he can’t filter like he used to. The bouncer is overwhelmed, and the nightclub becomes full of rowdy assholes disrupting the normal dancing. ‘We have fundamental limitations,’ Adam added.

结果，很多时候，他无法像以前那样进行过滤。保镖不知所措，夜总会里挤满了吵闹的混蛋，扰乱了正常的舞蹈。“我们有根本的局限性，”亚当补充道。

‘We could ignore them, and pretend we’re capable of everything we would wish – or we can acknowledge them, and live our lives in a better way.’

“我们可以忽略它们，假装我们有能力实现我们想要的一切——或者我

们可以承认它们，并以更好的方式生活。”



In my first two weeks in Provincetown, I felt I had finally stepped out of the madness. I had gone to live in a monotasking world that wasn't forcing on me the mental pressure of switching and filtering. This is how my summer is going to be, I thought to myself. An oasis of calm.

在普罗温斯敦的头两周，我感觉自己终于走出了疯狂。我已经生活在一个单一任务的世界里，这个世界不会给我带来切换和过滤的精神压力。我心里想，这就是我的夏天。一片平静的绿洲。

An example of how to live differently. I ate cupcakes and laughed with strangers. I felt light, and free.

如何以不同的方式生活的例子。我一边吃纸杯蛋糕，一边和陌生人一起欢笑。我感到轻松、自由。

And then something happened that I didn't expect. On the fourteenth day I woke up, and my hand reached immediately for the nightstand to grab my iPhone, as it had done every morning since I arrived. It found only my dumb-phone, on which there were no messages, only the option to tell the nearest hospital I had fallen over. I could hear the ocean whispering in the distance.

然后发生了我没想到的事情。第十四天我醒来，我的手立即伸向床头柜拿我的 iPhone，自从我到达以来每天早上都是这样。它只找到了我的哑手机，上面没有任何消息，只有告诉最近的医院我摔倒的选项。我能听到远处大海的低语声。

I turned and saw all the books I had been longing to read, waiting for me. And I felt an intense sensation – something I couldn't quite place. And at that moment, the worst week I had experienced in years began.

我转身，看到所有我一直想读的书都在等着我。我感受到了一种强烈的感觉——一种我无法确定的感觉。就在那一刻，我多年来经历的最糟糕的一周开始了。

Cause Two: The Crippling of Our Flow States

2

2 原因二：心流状态的削弱

On the first day of my mental free-fall, I walked down the beach and saw the same thing that had been scratching at me since Memphis. Almost everyone was staring at their screens.

在我精神自由落体的第一天，我沿着海滩漫步，看到了自孟菲斯以来一直困扰着我的同样的事情。几乎每个人都盯着屏幕。

People seemed to be using Provincetown simply as a backdrop for selfies, rarely looking up, at the ocean, or each other. Except this time, the itch I felt wasn't to yell: You're wasting your lives, put the damn phone down. It was to yell: Give *me* that phone! *Mine!*

人们似乎只是将普罗温斯敦作为自拍的背景，很少抬头看大海或彼此。只是这一次，我感到的渴望并不是大喊大叫：你在浪费生命，把该死的电话放下。那是在喊：把电话给我！矿！

Every time I switched on my iPod to listen to an audiobook or some music, I also had to switch on my noise-cancelling headphones, and they would say: 'Searching for Johann's iPhone.'

每次我打开 iPod 听有声读物或音乐时，我还必须打开降噪耳机，他们会说：“正在搜索约翰的 iPhone”。

Searching for Johann's iPhone.' The Bluetooth was trying to connect, but it couldn't, so then it would say sadly: 'Connection cannot be made.' That was how it felt. The French philosopher Simone de Beauvoir said that when she became an atheist, it felt like the world had fallen silent. When my phone was taken away, I felt like a large part of the world had vanished. As that first week ended, its absence flooded me with an angry panic. I wanted my phone.

正在寻找 Johann 的 iPhone。”蓝牙尝试连接，但无法连接，然后它会悲伤地说：“无法连接。”就是这种感觉。法国哲学家西蒙·德·波伏娃说，当她成为无神论者时，感觉世界都陷入了沉默。当我的手机被拿走时，我感觉世界的很大一部分都消失了。当第一周结束时，它的缺席让我充满了愤怒的恐慌。我想要我的手机。

I wanted my email. And I wanted them at once. Every time I left the beachhouse, I instinctively patted my pocket to make sure my phone was there, and I always felt a lurch when I realised it was missing. It was like I had lost part of my own body.

我想要我的电子邮件。我立刻就想要它们。每次离开海滨别墅时，我都会本能地拍拍口袋以确保手机还在，当我意识到手机不见了时，我总是感到一阵踉跄。就像我失去了自己身体的一部分一样。

I turned to my piles of books, thinking idly of how, all through my teens and twenties, I would spend days on end lying in a bed, doing nothing but reading in one great gulp. But in Provincetown up to that point, I had been reading in a rushed, hyperactive way – I was scanning Charles Dickens the way you might scan a blog for vital information. My reading was manic and extractive. Okay, I've got it, he's an orphan: what's your point? I could see this was foolish, but I couldn't stop. I couldn't slow my mind in the way that yoga slowed my body.

我转向我的成堆的书，漫不经心地想着，在我十几岁和二十几岁的时候，我会连续几天躺在床上，除了狼吞虎咽地读书之外什么都不做。但在那之前，在普罗温斯敦，我一直在以一种匆忙、过度活跃的方式阅读——我正在浏览查尔斯·狄更斯，就像你浏览博客以获取重要信息一样。我的阅读是狂躁而精辟的。好吧，我明白了，他是个孤儿：你的意思是什么？我知道这很愚蠢，但我无法阻止。我无法像瑜伽放慢我的身体那样放慢我的思维。

At a loss, I took to taking out my comically large medical-device phone and stabbing at its massive buttons. I stared at it helplessly. An image came into my head of a wildlife documentary I had seen as a kid, of a penguin whose baby died.

不知所措，我开始拿出我那部大得可笑的医疗设备手机，并刺痛它巨大的按钮。我无助地看着它。我的脑海中浮现出小时候看过的一部野生动物纪录片的画面，一只企鹅的孩子死了。

She kept nudging it with her beak for hours, hoping it would come to life. But no matter how much I prodded it, my chunky Jitterbug could not access the web.

她不断地用喙轻推它几个小时，希望它能活过来。但无论我如何刺激它，我的矮胖 Jitterbug 都无法访问网络。

All around me, I could see reminders of why I had cast aside my phone in the first place. I sat in Café Heaven, a lovely little place in the West End of Provincetown, and ate an eggs Benedict. Next to me there were two men in, I guess, their mid-twenties.

在我周围，我可以看到一些提醒，让我想起为什么我首先扔掉了手机。我坐在普罗温斯敦西区一个可爱的小地方天堂咖啡馆里，吃了一个班尼迪克蛋。我旁边有两个男人，我猜，大概二十多岁。

I shamelessly eavesdropped on their conversation while pretending to read *David Copperfield*. It was clear they had met on an app, and this was the first time they had seen each other in person. There was something about their conversation that seemed odd to me, and I couldn't place it at first. Then I realised they weren't, in fact, having a conversation at all.

我假装读《大卫·科波菲尔》，厚颜无耻地偷听他们的谈话。显然他们是在应用程序上认识的，而且这是他们第一次见面。他们的谈话让我觉得有些奇怪，一开始我也搞不明白。然后我意识到他们实际上根本没有交谈。

What would happen is the first one, who was blond, would talk about himself for ten minutes or so. Then the second one, who was dark-haired, would talk about himself for ten minutes. And they alternated in this way, interrupting each other.

会发生的事情是，第一个金发碧眼的人会谈论自己十分钟左右。然后第二个黑头发的人会谈论自己十分钟。而他们就这样交替着，互相打断。

I sat next to them for two hours, and at no point did either of them ask the other person a question. At one point, the dark-haired man mentioned that his brother had died a month before.

我在他们旁边坐了两个小时，他们都没有问过对方任何问题。有一次，黑发男子提到他的兄弟一个月前就去世了。

The blond didn't even offer a cursory 'I'm so sorry to hear that': he simply went back to talking about himself. I realised that if they had met up simply to read out their own Facebook status updates to each other in turn, there would have been absolutely no difference.

金发女郎甚至没有粗略地说一句“听到这个消息我很遗憾”：他只是继续谈论自己。我意识到，如果他们见面只是为了轮流向对方宣读自己的 Facebook 状态更新，那绝对没有什么区别。

I felt like everywhere I went, I was surrounded by people who were broadcasting but not receiving. Narcissism, it occurred to me, is a corruption of attention – it's where your attention becomes turned in only on yourself and your own ego. I don't say this with any sense of superiority. I am embarrassed to describe what I realised in that week that I missed most about the web. Every day in my normal life – sometimes several times a day – I would look at Twitter and Instagram to see how many followers I had. I didn't look at the feed, the news, the buzz – just my own stats. If the figure had gone up, I felt glad – like a money-obsessed miser checking the state of his personal stocks and finding he was slightly richer than yesterday.

我感觉无论我走到哪里，我周围都是在广播但没有接收的人。我发现，自恋是注意力的腐败——你的注意力只集中在你自己和你自己的自我身上。我这么说并没有任何优越感。我很不好意思地描述那一周我意识到我最想念网络的事情。在我的正常生活中，我每天（有时一天几次）都会查看 Twitter 和 Instagram，看看我有多少粉丝。我没有看动态、新闻、动态——只是看我自己的统计数据。如果这个数字上升了，我会感到高兴——就像一个痴迷于金钱的守财奴检查他个人股票的状况，发现他比昨天稍微富有一点。

It was as if I was saying to myself, See? More people are following you. You matter. I didn't miss the content of what they said. I just missed the raw numbers, and the sense that they were growing.

就好像我在对自己说，看到了吗？更多人关注你。你很重要。我没有错过他们所说的内容。我只是想念原始数字，以及它们正在增长的感觉。

I found that I had started to panic about irrational things. I kept wondering how, when I left Provincetown and took the boat back to Boston, I was going to get to my friend's house to retrieve my phone and laptop. What if there were no taxis at the dock? Would I be stranded?

我发现我开始对不合理的事情感到恐慌。我一直想知道，当我离开普罗温斯敦并乘船返回波士顿时，我将如何前往我朋友家取回我的手机和笔记本电脑。如果码头没有出租车怎么办？我会被困吗？

Would I never get to my phone? I have been around a lot of addiction in my life, and I knew what I was feeling – the addicted person's craving for the thing that numbs their nagging sense of hollowness.

我永远不会拿起手机吗？我一生中经历过很多上瘾的经历，我知道自己的感受是什么——上瘾的人对某种东西的渴望，可以麻痹他们挥之不去的空虚感。

One day, I lay on the beach, using puffy dried seaweed as a pillow, trying to read, and I started to angrily reproach myself for not being relaxed, for not being focused, for not starting to write the novel I had been planning for so long.

有一天，我躺在沙滩上，用蓬松的干海藻当枕头，想看书，我开始愤怒地责备自己不放松，不专心，不开始写我一直计划的小说。这么久。

Here you are in paradise, I kept saying to myself; you ditched the phone; now focus. Focus, damn you. I thought back to this moment when, over a year later, I interviewed Professor Gloria Mark, who has spent years studying the science of interruptions. She explained to me that if you have spent long enough being interrupted in your daily life, you will start to interrupt yourself even when you are set free from all these external interruptions.

你就在天堂，我不断地对自己说；你抛弃了电话；现在重点。集中注

意力，你他妈的。我回想起一年多后，我采访了格洛丽亚·马克教授，她花了多年时间研究干扰科学。她向我解释说，如果你在日常生活中被打扰的时间足够长，即使你摆脱了所有这些外部干扰，你也会开始打扰自己。

I kept looking at things and imagining how I would describe them in a tweet, and then imagining what people would say in response.

我不断地观察事物，想象如何在推文中描述它们，然后想象人们会怎么说。

I realised I had, for over twenty years now, been sending out and receiving signals with large numbers of people all throughout the day. Texts, Facebook messages, phone calls – they were all little ways in which the world seemed to say: I see you. I hear you. We need you.

我意识到，二十多年来，我整天都在与大量的人发送和接收信号。短信、Facebook 消息、电话——这些都是世界似乎在说：我看到你了。我听到了。我们需要你。

Signal back. Signal more. Now the signals were gone, and it felt like the world was saying – you don't matter. The absence of these insistent signals seemed to suggest an absence of meaning.

回信号。发出更多信号。现在信号消失了，感觉全世界都在说——你不重要。缺乏这些持续的信号似乎表明缺乏意义。

I would start conversations with people – on the beach, in bookstores, in cafés – and they were often friendly, but the conversations seemed to have a low social temperature compared to the web-based ones I had lost.

我会开始与人们交谈——在海滩上、在书店里、在咖啡馆里——他们通常很友好，但与我失去的基于网络的对话相比，这些对话的社交温度似乎较低。

No stranger is going to flood you with hearts and tell you you're great. For years I had derived a large part of my meaning in life from the thin, insistent signals of the web. Now they were gone, and I could see how paltry and lacking in substance they were.

没有陌生人会用心淹没你并告诉你你很棒。多年来，我的大部分人生意义都是从网络上微弱而持续的信号中获得的。现在它们都消失了，我可以看到它们是多么微不足道，缺乏实质内容。

But, still, I missed them.

但是，我仍然想念他们。

I now faced a choice. I told myself: By leaving that world behind, you've created a vacuum. If you're going to stay away from it, now you need to fill the vacuum with something. It was only in the third week – after feeling wretched – that I began to find a way to do this.

我现在面临一个选择。我告诉自己：把那个世界抛在身后，你就创造了一个真空。如果你想远离它，现在你需要用一些东西来填补真空。直到第三周——在感到痛苦之后——我才开始找到一种方法来做到这一点。

I found a way out of my funk by returning to the research of a remarkable man who opened up a whole new field of psychology in the 1960s, and whose work I had studied over the years.

我找到了摆脱恐惧的方法，那就是回到一位杰出人士的研究中，他在 20 世纪 60 年代开辟了一个全新的心理学领域，多年来我一直在研究他的著作。

He made a breakthrough – this man identified a way human beings can access their own powers of focus, in a way that makes it possible to concentrate for long periods without it feeling like a huge effort.

他取得了突破——这个人找到了一种方法，人类可以利用自己的注意力，让人们可以长时间集中注意力，而不需要付出巨大的努力。

To understand how it works, I think it helps to first hear the story of how he made this discovery. I learned a lot of this story from him directly, later, when I went to visit him in Claremont, California.

为了理解它是如何工作的，我认为首先听听他如何做出这一发现的故事会有所帮助。后来，当我去加利福尼亚州克莱蒙特拜访他时，我直接从他那里了解到了很多这个故事。

It begins with him as an eight-year-old boy, fleeing Nazi bombs at the

height of the Second World War, in a city on the coast of Italy, alone.

故事从他八岁的男孩开始，在第二次世界大战最激烈的时期，他独自在意大利海岸的一座城市逃离纳粹炸弹。



Mihaly had to run, but he had no idea where to go. The air-raid siren was making a familiar shrieking sound, warning the townspeople that soon there would be Nazi planes overhead. These planes were flying from Germany to Africa, and everybody in the town – even a kid like Mihaly – knew that if the planes couldn't make it across because of bad weather, they had a plan B. It was to drop their bombs right here, onto this small town. Mihaly tried to get into the nearest air-raid shelter, but it was full. Go next door, he thought, to the butcher's shop – you could hide in there. Its shutters were down. A few grown-ups managed to find the key, and they all hurried inside.

米哈伊必须逃跑，但他不知道该跑到哪里去。空袭警报发出熟悉的尖叫声，警告镇上的人们很快就会有纳粹飞机飞过头顶。这些飞机从德国飞往非洲，镇上的每个人——甚至是像米哈里这样的孩子——都知道，如果飞机因为恶劣天气而无法穿越，他们有一个备用计划。那就是正确投下炸弹这里，来到这个小镇。米哈里试图进入最近的防空洞，但防空洞已经满了。去隔壁，他想，去肉店——你可以躲在那里。它的百叶窗已经放下。几个大人找到了钥匙，都赶紧走了进去。

In the darkness, it became clear something was dangling down from the ceiling. It was hanging meat. But they saw this wasn't an animal – it was the wrong shape. As their eyes refocused, they realised it was the bodies of two men.

黑暗中，可以清楚地看到有什么东西从天花板上垂下来。原来是挂着肉啊。但他们发现这不是动物——它的形状不对。当他们的目光重新聚焦时，他们发现那是两具男人的尸体。

They recognised them as the butchers themselves, sagging from their own meat-hooks. Mihaly ran again, deeper into the shop – only to run into the hanging body of a third man. They had been suspected of being collaborators with the fascists, so they had been killed.

他们认出他们就是屠夫本人，从自己的肉钩上垂下来。米哈利再次跑向商店深处，结果撞上了第三个人悬挂的尸体。他们被怀疑与法西斯勾结，因此被杀害。

The air-raid siren was still sounding, and Mihaly hid there, close to the corpses.

空袭警报仍在响起，米哈伊躲在尸体附近。

It had seemed to the boy for some time that the adult world had lost its mind. Mihaly Csikszentmihalyi (pronounced cheek-sent-me-high-ee) was born in 1934 in Fiume, an Italian town close to the Yugoslavian border.

一段时间以来，男孩似乎觉得成人世界已经失去了理智。 Mihaly Csikszentmihalyi (发音为“cheek-sent-me-high-ee”) 1934 年出生于靠近南斯拉夫边境的意大利小镇阜姆。

His father was a diplomat there for the Hungarian government, so Mihaly grew up on a street where people routinely spoke three or four languages.

他的父亲是匈牙利政府的一名外交官，因此米哈利在一条人们通常讲三四种语言的街道上长大。

It was a family where people came up with big, sometimes mad projects: one of his big brothers was the first person ever to hang-glide from Russia to Austria. But when Mihaly was six, the war began, and ‘the collapse happened’, he told me.

在这个家庭里，人们想出了一些宏大的、有时甚至是疯狂的项目：他的一个哥哥是第一个从俄罗斯滑翔到奥地利的人。但当米哈利六岁的时候，战争开始了，“崩溃发生了”，他告诉我。

He was not allowed to play outside on the street, so he invented worlds of play within his own home. He would stage elaborate battles with toy soldiers that went on for weeks, planning out every move in this fantasy war.

他不被允许在街上玩耍，所以他在自己的家里发明了玩耍的世界。他会与玩具士兵进行精心策划的战斗，持续数周，计划好这场奇幻战争中的每一步行动。

He spent a lot of his nights in chilly bomb shelters, sitting under

blankets, terrified. ‘You never knew what was actually happening,’ he recalled. When the all-clear sounded in the mornings, people would leave politely and go to work.

他在寒冷的防空洞里度过了很多个夜晚，坐在毯子下，充满恐惧。“你永远不知道到底发生了什么，”他回忆道。当早晨警报响起时，人们就会礼貌地离开去上班。

Italy was getting too dangerous, so his family took him to a seaside town across the border named Opatija – but before long, the town was besieged from all sides.

意大利变得太危险了，所以他的家人带他去了边境另一边一个名叫奥帕蒂亚的海滨小镇——但不久之后，这个小镇就被四面八方围困了。

Partisans would come down and kill anyone suspected of collaborating with the invaders, while the Nazis bombarded from the air. ‘Now, nothing was getting safe,’ Mihaly told me.

游击队会下来杀死任何涉嫌与入侵者合作的人，而纳粹则从空中轰炸。“现在，一切都变得不安全了，”米哈里告诉我。

‘I never found a stable world in which I [could] live.’ By the time the war ended, Europe was in ruins, and his family had lost everything. They got word that one of his brothers had been killed in the fighting, and another, Moricz, had been taken by Stalin to a Siberian concentration camp. ‘By the time I was ten years old,’ he remembered years later, ‘I was convinced that grown-ups didn’t know how to live a good life.’

“我从未找到一个可以让我生活的稳定世界。”战争结束时，欧洲已是一片废墟，他的家人也失去了一切。他们得到消息说，他的一个兄弟在战斗中丧生，另一个兄弟莫里茨被斯大林带到了西伯利亚集中营。“当我十岁时，”多年后他回忆道，“我确信成年人不知道如何过上美好的生活。”

After the war, he and his parents ended up in a refugee camp, which he found squalid, and lacking in hope. One day, in these ruins of a life, Mihaly was told that he was going to join a Scout troop for boys in the camp, and he started going out into the wilderness with them.

战争结束后，他和父母来到了难民营，他发现那里肮脏且缺乏希望。

有一天，在生活的废墟中，米哈利被告知他要加入营地中的一支男孩子军，他开始和他们一起走进荒野。

He discovered that he felt most alive when he was doing something difficult, like navigating a steep ascent, or finding his way through a ravine. He thinks this experience saved him.

他发现，当他做一些困难的事情时，比如攀登陡峭的山坡，或者穿过峡谷，他感觉自己最有活力。他认为这次经历救了他。

When he was thirteen, he quit school, because he couldn't see how all this adult wisdom was going to help him when it had driven European civilisation off a cliff. He found his own way to Rome, and he started working as a translator in that trashed, half-starved city.

当他十三岁时，他辍学了，因为他看不到所有这些成年人的智慧在将欧洲文明推下悬崖时对他有什么帮助。他找到了自己前往罗马的路，并开始在这座破烂不堪、半饥饿的城市里担任翻译。

He wanted to get back out into the mountains, so he saved up for a long time to go to Switzerland. When he was fifteen, he was finally able to take the train to Zurich, and while he was waiting around for the transport to the Alps, he saw an advertisement for a psychology lecture.

他想回到山里，所以他存了很长时间的钱去瑞士。十五岁时，他终于能坐火车去苏黎世，当他在等待开往阿尔卑斯山的交通工具时，他看到了一则心理学讲座的广告。

The lecturer was Carl Jung, a legendary Swiss psychoanalyst, and while Mihaly wasn't drawn to the content of Jung's ideas, he was thrilled by the idea of looking at how the human mind works in a scientific way.

讲师是卡尔·荣格（Carl Jung），一位传奇的瑞士精神分析学家，虽然米哈利并没有被荣格的思想内容所吸引，但他对以科学的方式观察人类思维如何运作的想法感到兴奋。

He decided to become a psychologist, but it turned out there were no psychology degrees in Europe. He learned, though, that the subject

existed in a distant country he had only seen in the movies: the United States.

他决定成为一名心理学家，但结果发现欧洲没有心理学学位。然而，他了解到这个主题存在于一个他只在电影中见过的遥远国家：美国。

Finally, after years of saving, he made it there – only to get a nasty shock when he arrived. American psychology was dominated by one big idea, epitomised by a famous scientist. A Harvard professor named B. F. Skinner had become an intellectual celebrity by discovering something strange. You can take an animal that seems to be freely making up its own mind about what to pay attention to – like a pigeon, or a rat, or a pig – and you can get it pay attention to whatever you choose for it.

最终，经过多年的积蓄，他到达了那里——但当他到达时却受到了严重的震惊。美国心理学被一个伟大的思想所主导，这个思想是一位著名科学家的缩影。一位名叫 B. F. Skinner 的哈佛大学教授因发现了一些奇怪的事情而成为知识界名人。你可以拿一只似乎可以自由决定要注意什么的动物——比如鸽子、老鼠或猪——你可以让它注意你为它选择的任何东西。

You can control its focus, as surely as if it was a robot and you had created it to obey your whims. Here's an example of how Skinner did it that you can try for yourself. Take a pigeon. Put it in a cage. Keep it until it is hungry. Then introduce a bird feeder that releases seed into the cage when you push a button.

你可以控制它的焦点，就像它是一个机器人一样，你创造它是为了服从你的突发奇想。这是斯金纳如何做到这一点的一个例子，你可以自己尝试一下。拿一只鸽子。把它放在笼子里。留着直到它饿了为止。然后引入一个喂鸟器，当您按下按钮时，它会将种子释放到笼子中。

Pigeons move around a lot – so wait until the pigeon makes a random movement that you have chosen in advance (like, say, jerking its head up high, or sticking out its left wing), and at that precise moment, release some pellets.

鸽子经常移动——所以等到鸽子做出你预先选择的随机动作（比如，高高地抬起头，或者伸出左翼），然后在那个精确的时刻，释放一些颗粒。

Then wait for it to make the same random movement again, and give it more pellets.

然后等待它再次进行相同的随机运动，并给它更多的颗粒。

If you do this a few times, the pigeon will quickly learn that if it wants pellets, it should carry out the random gesture you have chosen – and it will start to do it a lot.

如果你这样做几次，鸽子很快就会知道，如果它想要颗粒，它应该执行你选择的随机手势 - 并且它会开始经常这样做。

If you manipulate it correctly, its focus will come to be dominated by the twitch that you chose to reward. It will come to jerk up its head or stick out its left wing obsessively. When Skinner discovered this, he wanted to figure out – how far can you take this?

如果你正确地操纵它，它的焦点将被你选择奖励的抽搐所主导。它会猛地抬起头，或者着迷地伸出左翼。当 Skinner 发现这一点时，他想弄清楚 – 你能把它做到什么程度？

How elaborately can you program an animal using these reinforcements? He discovered you can take it really far. You can teach a pigeon to play ping-pong. You can teach a rabbit to pick up coins and put them into piggy banks. You can teach a pig to vacuum.

你能用这些强化手段对动物进行怎样精细的编程？他发现你可以走得很远。你可以教鸽子打乒乓球。您可以教兔子捡起硬币并将其放入存钱罐中。你可以教猪用吸尘器。

Many animals will focus on very complex – and, to them, meaningless – things, if you reward them right.

如果你给予适当的奖励，许多动物会专注于非常复杂且对它们来说毫无意义的事情。

Skinner became convinced that this principle explained human behaviour almost in its entirety. You believe that you are free, and that you make choices, and you have a complex human mind that is selecting what to pay attention to – but it's all a myth. You and your sense of focus are simply the sum total of all the reinforcements you

have experienced in your life.

斯金纳确信这一原理几乎可以解释人类的全部行为。你相信你是自由的，你可以做出选择，你有一个复杂的人类思维来选择要关注的东西——但这都是一个神话。你和你的专注感只是你一生中经历过的所有强化的总和。

Human beings, he believed, have no minds – not in the sense that you are a person with free will making your own choices. You can be reprogrammed in any way that a clever designer wants. Years later, the designers of Instagram asked: If we reinforce our users for taking selfies – if we give them hearts and likes – will they start to do it obsessively, just like the pigeon will obsessively hold out its left wing to get extra seed?

他认为，人类没有思想——并不是说你是一个有自由意志、可以做出自己选择的人。您可以按照聪明的设计师想要的任何方式重新编程。多年后，Instagram 的设计师问道：如果我们鼓励用户自拍——如果我们给予他们爱心和点赞——他们会开始着迷地自拍，就像鸽子会着迷地伸出左翼以获得额外的种子一样？

They took Skinner's core techniques, and applied them to a billion people.

他们采用了斯金纳的核心技术，并将其应用于十亿人。

Mihaly learned that these ideas ruled American psychology, and they were hugely influential in American society too. Skinner was a star, featured on the front page of *Time* magazine. He was so famous that by 1981, 82 percent of the American college-educated public could identify who he was.

米哈里了解到这些观念统治着美国的心理，它们对美国社会也产生了巨大的影响。斯金纳是一位明星，登上了《时代》杂志的头版。他是如此出名，以至于到 1981 年，82% 受过大学教育的美国公众都能认出他是谁。

To Mihaly, this seemed like a bleak and limited view of human psychology. It clearly yielded some results – but he believed it was missing most of what it means to be human.

对米哈里来说，这似乎是对人类心理学的一种悲观而有限的看法。它显然产生了一些结果——但他认为它遗漏了人类的大部分意义。

He decided he wanted to explore the aspects of human psychology that were positive, and nourishing, and generated something more than hollow mechanical responses. But there weren't many people in American psychology that thought like this.

他决定探索人类心理中积极、有益的方面，并产生比空洞的机械反应更多的东西。但在美国心理学界，持这种想法的人并不多。

To begin, he decided to study something that seemed to him to be one of the great achievements of human beings – the making of art. He had seen destruction; now it was time to study creation. So, in Chicago, he persuaded a group of painters to let him witness their process over many months, so he could try to figure out the underlying psychological processes that were driving the unusual kind of focus they had chosen to dedicate their lives to.

首先，他决定研究在他看来是人类伟大成就之一的东西——艺术创作。他目睹了毁灭；现在是时候研究创造了。因此，在芝加哥，他说服了一群画家让他见证他们几个月的过程，这样他就可以尝试找出潜在的心理过程，这些过程驱动着他们选择奉献一生的不寻常的焦点。

He watched one artist after another focusing on a single image and attending to it with great care.

他看着一位又一位艺术家专注于一幅图像，并非常小心地处理它。

Mihaly was struck by one thing above all else – for the artist, when they were in the process of creation, time seemed to fall away. They almost appeared to be in a hypnotic trance. It was a deep form of attention that you rarely see elsewhere.

米哈伊最被一件事所震惊——对于艺术家来说，当他们在创作的过程中，时间似乎在流逝。他们看起来几乎处于催眠状态。这是一种在其他地方很少见到的深层关注。

Then he noticed something puzzling. After investing all this time in creating their paintings, when they were finished, the artists didn't triumphantly gaze at what they had made and show it off and seek out praise for it.

然后他注意到了一些令人费解的事情。在投入了如此多的时间来创作他们的画作之后，当他们完成时，艺术家们并没有得意地凝视着他们的

作品，炫耀它并寻求对它的赞扬。

Almost all of them simply put the painting away and started working on another one. If Skinner was right – that human beings do things just to gain rewards and avoid punishments – this made no sense.

几乎所有人都只是把这幅画收起来，开始创作另一幅画。如果斯金纳是对的——人类做事只是为了获得奖励和避免惩罚——那么这就没有意义。

You'd done the work; now here's the reward, right in front of you, for you to enjoy. But creative people seemed mostly uninterested in rewards; even money didn't interest most of them.

您已经完成了工作；现在奖励就在您的面前，供您享受。但有创造力的人似乎大多对奖励不感兴趣；他们中的大多数人甚至对金钱也不感兴趣。

‘When they finished,’ Mihaly said to an interviewer later, ‘the object, the outcome was not important.’

“当他们完成后，”米哈里后来对采访者说，“目标、结果都不重要了。”

He wanted to understand what was actually driving them. What made it possible for them to focus on just one thing for so long? It became clear to Mihaly that ‘what was so enthralling about painting was’ something about ‘the process of painting itself’. But what? To try to understand this better, Mihaly started to study adults who engaged in other activities – people who were long-distance swimmers, or rock climbers, or chess players. He only looked at first at non-professionals. Often they were doing things that were physically uncomfortable, exhausting, and even dangerous, for no obvious reward – yet they loved it.

他想要了解到底是什么在推动他们。是什么让他们能够这么长时间专注于一件事？米哈里清楚地意识到，“绘画如此迷人的地方在于”“绘画过程本身”。但什么？为了更好地理解这一点，米哈里开始研究从事其他活动的成年人——长距离游泳运动员、攀岩运动员或国际象棋运动员。他首先只关注非专业人士。他们经常做一些身体不舒服、疲惫不堪、甚至危险的事情，而且没有明显的回报——但他们喜欢这样。

He talked to them about how they felt when they were doing the thing that drew this extraordinary focus out of them. He noticed that although these activities were very different, the way the people described how they felt had striking similarities.

他们与他们讨论了当他们做那些让他们异常专注的事情时的感受。他注意到，尽管这些活动非常不同，但人们描述他们感受的方式却有着惊人的相似之处。

One word kept cropping up again and again. They kept saying things like: 'I was carried on by the flow.'

有一个词不断地出现。他们不断地说：“我随波逐流。”

One rock climber told him later: 'The mystique of rock-climbing is climbing; you get to the top of a rock glad it's over but really wish it could go on forever. The justification of climbing is climbing, like the justification of poetry is writing.'

一位攀岩爱好者后来告诉他：“攀岩的神秘之处在于攀爬；你到达岩石顶上时很高兴一切都结束了，但真的希望它能永远持续下去。攀登的理由是攀登，就像诗歌的理由是写作一样。

You don't conquer anything except things in yourself ... The act of writing justifies poetry. Climbing is the same: recognising you are a flow. The purpose of flow is to keep on flowing, not looking for a peak or utopia but staying in the flow.

除了你自己之外，你无法征服任何东西……写作的行为证明了诗歌的合理性。攀登也是一样的：认识到你是一种流动。流动的目的是持续流动，不是寻找高峰或乌托邦，而是留在流动中。

It is not a moving up but a continuous flowing; you move up to keep the flow going.'

它不是上升，而是持续流动；你向上移动以保持流动。

Mihaly began to wonder if these people were in fact describing a fundamental human instinct that had not been studied by scientists before. He called it a 'flow state'.

米哈里开始怀疑这些人是否确实描述了一种科学家以前从未研究过的

人类基本本能。他称之为“心流状态”。

This is when you are so absorbed in what you are doing that you lose all sense of yourself, and time seems to fall away, and you are flowing into the experience itself. It is the deepest form of focus and attention that we know of.

这是当你如此专注于你正在做的事情时，你失去了所有的自我意识，时间似乎在流逝，而你正在流入体验本身。这是我们所知道的最深层的专注和注意力形式。

When he began to explain to people what a flow state is and asked if they had ever experienced something like it, 85 percent of them recognised and remembered at least one time they'd felt this way – and they often said these moments were the highlights of their lives.

当他开始向人们解释什么是心流状态并询问他们是否曾经经历过类似的事情时，85%的人认识到并记得至少一次他们有过这种感觉 – 他们经常说这些时刻是亮点他们的生活。

It didn't matter if they got there by performing brain surgery or strumming the guitar or making great bagels – they described their flow states with wonder. He found himself thinking back to being a child on the floor of a war-smashed city, planning elaborate battles with his toy soldiers, and then to himself at the age of thirteen, exploring the hills and mountains around his refugee camp.

不管他们是通过脑部手术、弹吉他还是制作美味的百吉饼到达那里——他们都惊奇地描述了自己的心流状态。他发现自己回想起小时候在一座被战争摧毁的城市的地板上，与他的玩具士兵计划精心策划的战斗，然后在十三岁的时候独自探索难民营周围的丘陵和山脉。

He was discovering that if human beings drill down in the right way, we can hit a gusher of focus inside ourselves – a long surge of attention that will flow forth and carry us through difficult tasks in a way that feels painless, and in fact pleasurable.

他发现，如果人类以正确的方式深入研究，我们就能在自己内心集中注意力——一股长时间的注意力会涌出，带领我们以一种感觉无痛、实际上是愉快的方式完成困难的任务。。

So the obvious question is: where do we drill to get it? How can we bring about flow states? At first, most people assume they will achieve flow simply by relaxing into it – you picture yourself lying by the pool in Vegas sipping a cocktail.

所以显而易见的问题是：我们从哪里钻取它？我们怎样才能实现心流状态呢？起初，大多数人认为只要放松就可以达到心流状态——你想象自己躺在维加斯的泳池边喝着鸡尾酒。

But when he studied it, he found that in fact, relaxing rarely gets you into a flow state. You have to get there by a different route.

但当他研究后发现，事实上，放松很少能让你进入心流状态。你必须通过不同的路线到达那里。

Mihaly's studies identified many aspects of flow, but it seemed to me – as I read over them in detail – that if you want to get there, what you need to know boils down to three core components. The first thing you need to do is to choose a clearly defined goal.

米哈利的研究确定了心流的许多方面，但在我看来——当我详细阅读它们时——如果你想达到这个目标，你需要知道的可以归结为三个核心组成部分。您需要做的第一件事是选择一个明确定义的目标。

I want to paint this canvas; I want to run up this hill; I want to teach my child how to swim. You have to resolve to pursue it, and to set aside your other goals while you do.

我想在这块画布上作画；我想跑上这座山；我想教我的孩子如何游泳。你必须下定决心去追求它，并在追求它的同时把其他目标放在一边。

Flow can only come when you are monotasking – when you choose to set aside everything else and do one thing. Mihaly found that distraction and multitasking kill flow, and nobody will reach flow if they are trying to do two or more things at the same time.

只有当你只处理单一任务时——当你选择抛开其他一切而只做一件事时，心流才会出现。米哈利发现，分心和多任务处理会破坏心流状态，如果试图同时做两件或更多事情，就无法达到心流状态。

Flow requires all of your brainpower, deployed towards one mission.

心流需要你将所有的脑力都部署到一项任务上。

Secondly, you have to be doing something that is meaningful to you. This is part of a basic truth about attention: we evolved to pay attention to things that are meaningful to us. As Roy Baumeister, the leading expert on willpower I quoted in the introduction, put it to me: ‘A frog will look at a fly it can eat much more than a stone it can’t eat.’ To a frog, a fly is meaningful and a stone is not – so it easily pays attention to a fly, and rarely pays attention to a stone.

其次，你必须做一些对你有意义的事情。这是关于注意力的基本事实的一部分：我们进化到关注对我们有意义的事物。正如我在引言中引用的意志力领域权威专家罗伊·鲍迈斯特（Roy Baumeister）对我所说的那样：“青蛙会看着一只苍蝇，它能吃的东西比它不能吃的石头多得多。”对于青蛙来说，苍蝇就是有意义，而石头则没有意义——所以它很容易注意到一只苍蝇，却很少注意到一块石头。

This, he says, ‘goes back to the design of the brain ... It’s designed to pay attention to the stuff that matters to you.’ After all, ‘the frog who sat around all day looking at stones would have starved’.

他说，这“可以追溯到大脑的设计……它的设计目的是关注对你重要的事情。”毕竟，“整天坐在石头上看石头的青蛙会饿死的”。

In any situation, it will be easier to pay attention to things that are meaningful to you, and harder to pay attention to things that seem meaningless. When you are trying to make yourself do something that lacks meaning, your attention will often slip and slide off it.

在任何情况下，你都会更容易关注对你有意义的事情，而很难关注那些看似无意义的事情。当你试图让自己做一些缺乏意义的事情时，你的注意力常常会滑落。

Thirdly, it will help if you are doing something that is at the edge of your abilities, but not beyond them. If the goal you choose is too easy, you’ll go into autopilot – but if it’s too hard, you’ll start to feel anxious and off-kilter and you won’t flow either. Picture a rock climber who has medium-ranking experience and talent. If she clambers up any old brick wall at the back of a garden, she’s not going to get into flow because it’s too easy.

第三，如果你正在做的事情处于你能力的边缘，但又不超出你的能力，这将会有所帮助。如果你选择的目标太简单，你就会进入自动驾驶状态——但如果太难，你就会开始感到焦虑和不平衡，也不会流畅。想象一位具有中等经验和天赋的攀岩者。如果她爬上花园后面的任何旧砖墙，她就不会进入心流状态，因为这太容易了。

If she's suddenly told to climb the side of Mount Kilimanjaro, she won't get into flow either because she'll freak out. When she needs is a hill or mountain that is, ideally, slightly higher and harder than the one she did last time.

如果她突然被告知要去爬乞力马扎罗山的一侧，她也不会进入心流状态，因为她会吓坏了。当她需要的是一座小山或山峰时，理想情况下，比她上次做的山峰或山峰稍高一点或稍难一点。

So: to find flow, you need to choose one single goal; make sure your goal is meaningful to you; and try to push yourself to the edge of your abilities. Once you have created these conditions, and you hit flow, you can recognise it because it's a distinctive mental state.

所以：要找到心流，你需要选择一个目标；确保您的目标对您有意义；并尝试将自己推向能力的极限。一旦你创造了这些条件，并且你达到了心流状态，你就可以认识到它，因为它是一种独特的心理状态。

You feel you are purely present in the moment. You experience a loss of self-consciousness. In this state it's like your ego has vanished and you have merged with the task – like you are the rock you are climbing.

你感觉自己纯粹地活在当下。你会感到自我意识丧失。在这种状态下，就像你的自我消失了，你已经融入了任务——就像你是正在攀登的岩石一样。

By the time I met him, Mihaly was eighty-seven, and he had spent more than five decades studying flow states.

当我遇见他时，米哈里已经八十七岁了，他已经花了五十多年的时间研究心流状态。

He – along with scientists all over the world – had built up a broad and robust body of scientific evidence to show flow states are a real and deep form of human attention. They have also shown that the

more flow you experience, the better you feel.

他与世界各地的科学家一起建立了广泛而有力的科学证据，证明心流状态是人类注意力的真实而深刻的形式。他们还表明，你体验到的心流越多，你的感觉就越好。

Until his research, professional psychology in the US had been focused either on when things go wrong – when you're mentally distressed – or on the manipulative vision of B. F. Skinner. Mihaly made the case for 'positive psychology': that we should primarily focus on the things that make life worth living, and find ways to boost them.

在他的研究之前，美国的专业心理学要么关注事情出错的时候——当你精神痛苦的时候——要么关注 B. F. Skinner 的操纵性愿景。米哈利提出了“积极心理学”的观点：我们应该主要关注那些让生活变得有价值的事情，并找到促进它们的方法。

This disagreement seemed to me to lay the groundwork for one of the defining conflicts in the world today. We now live in a world dominated by technologies based on B. F. Skinner's vision of how the human mind works. His insight – that you can train living creatures to desperately crave arbitrary rewards – has come to dominate our environment.

在我看来，这种分歧为当今世界的决定性冲突之一奠定了基础。我们现在生活在一个以 B. F. Skinner 关于人类思维运作方式的愿景为基础的技术主导的世界。他的洞察力——你可以训练生物拼命渴望任意的奖励——已经主宰了我们的环境。

Many of us are like those birds in cages being made to perform a bizarre dance to get rewards, and all the while we imagine we are choosing it for ourselves – the men I saw in Provincetown obsessively posting selfies to Instagram started to look to me like Skinner's pigeons with a six-pack and a pina colada.

我们中的许多人就像那些关在笼子里的鸟儿，被强迫表演一种奇怪的舞蹈来获得奖励，而我们一直想象我们是在为自己选择它——我在普罗温斯敦看到的那些痴迷于在 Instagram 上发布自拍照的男人开始在我看来像斯金纳的鸽子配上六块腹肌和一杯果汁朗姆酒。

In a culture where our focus is stolen by these surface-level stimuli,

Mihaly's deeper insight has been forgotten: that we have within us a force that makes it possible to focus for long stretches and enjoy it, and it will make us happier and healthier, if only we create the right circumstances to let it flow.

在我们的注意力被这些表面刺激夺走的文化中，米哈利更深层次的洞察力被遗忘了：我们体内有一种力量，可以让我们长时间集中注意力并享受它，它会让我们更快乐、更健康，只要我们创造合适的环境让它流动。

Once I knew this, I understood why, when I felt constantly distracted, I didn't just feel irritated – I felt diminished. We know, at some level, that when we are not focusing, we are not using one of our greatest capacities.

一旦我知道了这一点，我就明白了为什么当我感到不断分心时，我不仅感到恼怒，而且感到自己被削弱了。我们知道，在某种程度上，当我们不集中注意力时，我们就没有发挥我们最大的能力之一。

Starved of flow, we become stumps of ourselves, sensing somewhere what we might have been.

由于缺乏流动，我们变成了自己的树桩，在某个地方感觉到我们本来可能是什么。



As an old man, something strange happened to Mihaly. After the Second World War was over, his older brother, Moricz, had been taken to a Stalinist concentration camp in Russia, and people who vanished into these gulags were often never heard from again – but after many years of silence, in which everyone assumed he was dead, Moricz reappeared.

作为一个老人，米哈伊身上发生了一些奇怪的事情。第二次世界大战结束后，他的哥哥莫里茨被带到俄罗斯的斯大林集中营，那些消失在古拉格集中营的人往往再也没有音讯——但在多年的沉默之后，每个人都认为他死了，莫里茨又出现了。

Released at last into a thawing Soviet Union, he struggled to find work: survivors of the gulags were marked as inherently suspect. Eventually he found employment as a stoker on the railways, even

though he had advanced degrees from Switzerland. He didn't complain.

最终被释放到解冻的苏联，他很难找到工作：古拉格集中营的幸存者被标记为本质上可疑的人。最终，他在铁路上找到了一份加油工的工作，尽管他拥有瑞士的高级学位。他没有抱怨。

When Moricz was in his eighties, Mihaly went to Budapest, in Hungary, to be reunited with him.

当莫里茨八十多岁的时候，米哈伊前往匈牙利的布达佩斯与他团聚。

Moricz's ability to find flow had been cut off in the most brutal ways, but Mihaly discovered that, very late in his life, his brother had been able, for the first time, to pursue something he had always loved. He was fascinated by crystals. He began to collect these sparkling rocks, and he had gathered examples from every continent. He went to meet dealers, he attended conventions, he read magazines about them. When Mihaly went to his home, it looked like a museum of crystals running from the ceiling to the floor, with special lighting fitted to show off their sparkle.

莫里茨寻找心流的能力被最残酷的方式切断了，但米哈利发现，在他生命的晚期，他的兄弟第一次能够追求他一直热爱的事情。他对水晶着迷。他开始收集这些闪闪发光的岩石，他从各个大陆收集了一些例子。他去见经销商，参加会议，阅读有关他们的杂志。当米哈利回到他的家时，它看起来就像一个从天花板到地板的水晶博物馆，安装了特殊的灯光来展示它们的光芒。

Moricz handed Mihaly a crystal the size of a child's fist and said: 'I was looking at this thing just yesterday. It was nine in the morning when I put it under the microscope. Outside, it was sunny, just like today.

莫里茨递给米哈伊一块儿童拳头大小的水晶，说道：“我昨天还在看这个东西。当我把它放在显微镜下时，已经是早上九点了。外面，阳光明媚，就像今天一样。

I kept turning the rock around, looking at all the fissures, the intrusions, the dozen or so different crystal formations inside and around ... then I looked up, and thought that a storm must be coming,

because it had gotten so dark ... then I realised it was not overcast, but the sun had been setting – it was seven in the evening.’ Mihaly thought the crystal was gorgeous, but wondered – ten hours?

我不停地转动岩石，看着所有的裂缝、侵入物、内部和周围的十几个不同的晶体结构……然后我抬起头，认为一场风暴一定要来了，因为天已经变得如此黑暗……然后我米哈利觉得水晶很漂亮，但又想知道——十个小时？

Then he realised. Moricz had learned how to read the rocks – to see where it came from, and its chemical composition. It was a chance for him to use his skills. For him, this triggered a flow state. All his life Mihaly had been learning how flow states can save us.

然后他意识到了。莫里茨学会了如何解读岩石——了解它的来源和化学成分。这对他来说是一个施展才华的机会。对他来说，这触发了心流状态。米哈利一生都在学习心流状态如何拯救我们。

Now he saw it in the face of his own gulag-starved brother, as they stared together into a shimmering crystal.

现在他在他自己的古拉格饥饿兄弟的脸上看到了这一点，因为他们一起凝视着一块闪闪发光的水晶。



The more he studied flow states, the more Mihaly noticed something else crucial about them. They are extraordinarily fragile and easily disrupted. He wrote: ‘Many forces, both within ourselves and in the environment, stand in the way’ of flow.

米哈伊对心流状态研究得越多，就越注意到它们的其他重要特征。它们极其脆弱且容易被破坏。他写道：“我们自身和环境中的许多力量都阻碍了流动”。

In the late 1980s, he discovered that staring at a screen is one of the activities we take part in that on average provides the lowest amount of flow.

20 世纪 80 年代末，他发现盯着屏幕是我们参与的平均流量最低的活动之一。

(He warned that ‘surrounded by an astonishing panoply of recreational gadgets ... most of us go on being bored and vaguely frustrated.’) But as I reflected on this in Provincetown, I realised that even though I had set aside my screens, I was still making a basic mistake.

(他警告说,“被令人惊叹的娱乐设备所包围……我们大多数人都会感到无聊和隐约沮丧。”)但当我在普罗温斯敦反思这一点时,我意识到,尽管我已经把屏幕放在一边,但我仍然感到无聊。仍然犯了一个基本错误。

‘To have a good life, it is not enough to remove what is wrong with it,’ Mihaly has explained. ‘We also need a positive goal; otherwise why keep going?’

“要过上美好的生活,仅仅消除其中的问题是不够的,”米哈利解释道。
“我们还需要一个积极的目标;否则为什么还要继续呢?”

In our normal lives, many of us try to seek relief from distraction simply by crashing – we try to recover from a day of overload by collapsing in front of the TV. But if you only break away from distraction into rest – if you don’t replace it with a positive goal you are striving towards – you will always be pulled back to distraction sooner or later. The more powerful path out of distraction is to find your flow.

在我们的正常生活中,我们中的许多人试图通过崩溃来摆脱分心——我们试图通过崩溃在电视机前从一天的超负荷中恢复过来。但如果你只是摆脱分心而休息——如果你不以你正在努力实现的积极目标来取代它——那么你迟早总会被拉回分心的状态。摆脱干扰的更有效方法是找到你的心流。

So at the end of that third week in Provincetown, I asked myself – why did you come here? It wasn’t just to get away from the phone and the Skinnerian reinforcements of constant likes and retweets and shares. You came here to write. Writing and reading have always been the primary sources of flow in my life.

因此,在普罗温斯敦的第三周结束时,我问自己——你为什么来这里?这不仅仅是为了摆脱电话和斯金纳式的不断点赞、转发和分享的强化。你来这里是为了写作。写作和阅读一直是我生活中的主要源泉。

I had been nurturing an idea for a novel for a long time, and I told myself I would get round to it one day, when I had the time. Well, I thought, here is the time. Drill there. See if it brings you flow.

我长期以来一直在酝酿写一部小说的想法，我告诉自己有一天当我有时间的时候我会抽出时间来写它。好吧，我想，现在是时候了。在那里钻。看看它是否给你带来流量。

This seemed to fit perfectly into Mihaly's model for how to create flow states – it required me to set aside my other goals; it was something meaningful to me; and it was something at the edge of my comfort zone, but not, I hoped, beyond it.

这似乎完全符合 Mihaly 的如何创建心流状态的模型——它要求我抛开其他目标；这对我来说是有意义的事情；这是我舒适区边缘的东西，但我希望不会超出它。

So on the first day of my third week, in my panicked funk, I sat on the sofa in my little corner of the beachhouse. I nervously opened the broken old laptop my friend Imtiaz had loaned me, and I wrote the first line of my novel. And I wrote the second line.

因此，在我第三周的第一天，我惊慌失措地坐在海滨别墅小角落的沙发上。我紧张地打开朋友伊姆蒂亚兹借给我的那台坏掉的旧笔记本电脑，写下了小说的第一行。我写了第二行。

And it became a paragraph, then a page. It was hard. I didn't particularly enjoy it. But the next day, conscious that I had to retrain my habits, I made myself do the same. And so it went on, day after day. I struggled. I disciplined myself.

它变成了一个段落，然后是一页。那个挺难。我并不是特别喜欢它。但第二天，意识到我必须重新训练我的习惯，我强迫自己也这样做。就这样，日复一日地持续着。我挣扎着。我严守自己。

By the end of the fourth week, the flow states started to come. And so it ran, into the fifth and sixth weeks – and soon, I was hurrying to my laptop, hungry to do it.

到第四周结束时，心流状态开始出现。就这样，一直持续到第五周和第六周——很快，我就冲向我的笔记本电脑，渴望这样做。

Everything Mihaly had described was there – the loss of ego; the loss of time; the sense that I was growing into something bigger than I had been before. Flow was carrying me through the difficult patches, the frustrations. It had unlocked my focus.

米哈里所描述的一切都在那里——自我的丧失；时间的损失；我感觉自己正在成长为比以前更伟大的人。心流带着我度过了困难和挫折。它释放了我的注意力。

I noticed that if I spent a day where I experienced three hours of flow early on, for the rest of the day, I felt relaxed and open and able to engage – to walk along the beach, or start chatting to people, or read a book, without feeling cramped, or irritable, or phone-hungry.

我注意到，如果我一开始就经历了三个小时的心流状态，那么在这一天剩下的时间里，我会感到放松、开放并且能够参与其中——沿着海滩散步，或者开始与人聊天，或者阅读一本书，而不会感到局促、烦躁或手机饥渴。

It was like the flow was relaxing my body and opening my mind – perhaps because I knew I had done my best. I felt myself falling into a different rhythm. I realised then that to recover from our loss of attention, it is not enough to strip out our distractions. That will just create a void. We need to strip out our distractions and to replace them with sources of flow.

就好像水流放松了我的身体并打开了我的思想——也许是因为我知道我已经尽力了。我感觉自己陷入了不同的节奏。那时我意识到，要从注意力分散中恢复过来，仅仅消除干扰是不够的。那只会造成一个空白。我们需要排除干扰，并用心流源泉取而代之。

After three months in Provincetown, I had written 92,000 words of my novel. They might be terrible, but in one sense, I didn't care.

在普罗温斯敦三个月后，我的小说写成了 92,000 字。它们可能很糟糕，但从某种意义上说，我不在乎。

The reason why became clear to me when one day, shortly before I left Provincetown, I placed my deckchair in the ocean so the sea was lapping at my feet and I finished the third volume of *War and Peace*. As I closed its last page, I realised I had been sitting there for most of

the day. I had been reading like this, day after day, for weeks. And I thought suddenly – it came back! My brain came back!

当有一天，在我离开普罗温斯敦之前不久，我把躺椅放在海里，海水拍打着我的脚，我读完了《战争与和平》第三卷时，我就明白了其中的原因。当我合上最后一页时，我意识到我已经坐在那里一整天了。几个星期以来，我一直这样日复一日地阅读。我突然想到——它又回来了！我的脑子又回来了！

I feared my brain had been broken, and this experiment might just reveal I was a permanently degenerated blob. But I could see now that healing was possible. I cried with relief.

我担心我的大脑已经坏了，而这个实验可能只会揭示我是一个永久退化的斑点。但我现在看到治愈是可能的。我如释重负地哭了。

I thought to myself – I never want to go back to email. I never want to go back to my phone. What a waste of time! What a waste of life! I felt this as strongly as I have ever felt anything.

我心想——我再也不想回到电子邮件了。我再也不想回到手机前了。真是浪费时间！多么浪费生命啊！我从未有过如此强烈的感受。

It might seem odd to describe something as immaterial as the internet as heavy, but that's how it felt to me in that moment – like there had been a vast weight on my back, and I had sloughed it off.

把像互联网这样无形的东西描述为沉重似乎很奇怪，但这就是我在那一刻的感受——就像我背上有一个巨大的重量，但我已经把它甩掉了。

And then I immediately felt uncomfortable with all these thoughts, and guilty. How will this sound, I wondered, when I describe it to people back home? It won't sound like a liberation to them. It will sound like a taunt.

然后我立刻对所有这些想法感到不舒服，并感到内疚。我想知道，当我向家乡的人们描述它时，这听起来会怎么样？对他们来说，这听起来不像是一种解放。这听起来像是一种嘲讽。

Yes, I managed to get away and find flow in a blissful way, but my situation in Provincetown was so radically different from the lives of anyone I knew – so wildly privileged – that I wondered for a while if it

had anything to teach anyone else.

是的，我设法离开并以一种幸福的方式找到心流，但我在普罗温斯敦的处境与我认识的任何人的生活截然不同——如此特权——以至于我有一段时间想知道它是否有什么可以教给其他人的东西。

I realised that this experience would only be meaningful if we could all find ways to integrate these experiences into our everyday lives. Later, in a very different place, I learned how this could be done.

我意识到，只有我们都能找到将这些经历融入我们日常生活的方法，这种经历才有意义。后来，在一个非常不同的地方，我了解到如何做到这一点。



When I said goodbye to Mihaly, it was clear he was unwell. His eyes were heavy, and he told me he had been sick lately. At one point in our conversation, a little stream of ants began to crawl across his desk, and he stopped and stared at them for a while. He was in his late eighties, and it seemed likely he was approaching the end of his life.

当我向米哈里告别时，很明显他身体不适。他的眼神很沉重，他告诉我他最近生病了。在我们谈话的某个时刻，一小群蚂蚁开始在他的桌子上爬行，他停下来盯着它们看了一会儿。他已经八十多岁了，看来他的生命已经接近尾声了。

But his eyes lit up when he told me: 'The best experiences in life that I had, when I thought back on it, came from times when I had been in the mountains climbing ... climbing and doing something really kind of difficult and dangerous – but within the scope of what I could do.' When you are approaching death, I thought to myself, you won't think about your reinforcements – the likes and retweets; you'll think about your moments of flow.

但当他告诉我时，他的眼睛闪闪发光：“当我回想起来时，我一生中最好的经历来自于我爬山的时候……爬山并做一些真正困难和危险的事情——但在我力所能及的范围内。”当你濒临死亡时，我心想，你不会想到你的增援——点赞和转发；你会思考你的心流时刻。

I felt in that moment that we all have a choice now between two profound forces – fragmentation, or flow. Fragmentation makes you

smaller, shallower, angrier. Flow makes you bigger, deeper, calmer. Fragmentation shrinks us. Flow expands us.

在那一刻我觉得我们现在都可以在两种深刻的力量之间做出选择——碎片化或流动。分裂让你变得更渺小、更肤浅、更愤怒。心流让你变得更大、更深、更平静。碎片化让我们变得渺小。流动使我们扩展。

I asked myself – do you want to be one of Skinner's pigeons, atrophying your attention on dancing for crude rewards, or Mihaly's painters, able to concentrate because you have found something that really matters?

我问自己——你想成为斯金纳的鸽子中的一员，为了粗暴的回报而将注意力集中在跳舞上，还是想成为米哈利的画家中的一员，因为你发现了真正重要的东西而能够集中注意力？

Cause Three: The Rise of Physical and Mental Exhaustion

3

3 原因三：身心疲惫的增加

The first thing I heard when I opened my eyes was the sound of the ocean lapping in the distance. Then I felt the sun flooding my bed, bathing me in light. Every morning in Provincetown, when this happened, I felt something strange in my body.

当我睁开眼睛时，我首先听到的是远处海浪拍打的声音。然后我感觉到阳光洒满我的床，让我沐浴在阳光中。在普罗温斯敦的每天早上，当这种情况发生时，我的身体都会感到有些奇怪。

It took me more than a month to realise what it was.

我花了一个多月才意识到那是什么。

Ever since I went through puberty, I'd thought of sleep as something I wrestled myself into and fought my way out of. I would go to bed sometime between one and three in the morning and immediately bunch up the pillows so they supported my hunched shoulders.

自从我进入青春期以来，我一直认为睡眠是我自己挣扎着进入并努力摆脱的事情。我会在凌晨一到三点之间上床睡觉，然后立即把枕头堆起来，这样它们就能支撑我驼背的肩膀。

Then I would try to stop my mind jangling as it ran through all the things that had happened that day, and all the things I would need to do when I woke up, and all the things to worry about in the world.

然后我会试着让自己的思绪停止胡思乱想，因为它会回想起那天发生的所有事情，以及我醒来后需要做的所有事情，以及世界上所有需要担心的事情。

To take my mind off this internal electrical storm, I'd usually watch a noisy TV show on my laptop. Sometimes that would lull me to sleep, but more often, it would awaken a new wave of anxious energy, and I would start emailing or researching again for another few hours.

为了让我的注意力从这种内部的电风暴中转移出来，我通常会在笔记本电脑上观看吵闹的电视节目。有时这会让我入睡，但更多时候，它会唤醒新一波焦虑的能量，我会再开始几个小时的电子邮件或研究。

Finally, on most nights, I would power down by taking a few melatonin gummies, and pass out.

最后，在大多数晚上，我都会通过服用一些褪黑素软糖来降低能量，然后昏倒。

Once I was in Zimbabwe and I spoke to some rangers who – as part of their jobs – had to knock out rhinos in order to give them medical treatment. They explained that they did it by darting them with a very powerful tranquilliser. As they described how the rhinos would stagger about in a panicked funk and then crash to the ground, I thought – hey, that's my sleep routine too.

有一次我在津巴布韦，我和一些护林员交谈过，作为他们工作的一部分，他们必须击倒犀牛才能给它们治疗。他们解释说，他们是通过向它们注射一种非常强大的镇定剂来做到这一点的。当他们描述犀牛如何惊慌失措地摇摇晃晃然后摔倒在地时，我想——嘿，这也是我的睡眠习惯。

After my chemical crash, I would be woken up six or seven hours later by a tag team of loud alarms. First, a radio alarm playing the BBC World Service would jolt me with the horrors of the day's news; then ten minutes later my phone would play a loud clanging alert; then ten minutes after that another alarm clock would howl.

化学事故发生后，六七小时后，我会被一队响亮的警报声吵醒。首先，播放 BBC World Service 的广播闹钟会让我因当天的恐怖新闻而感到震惊；十分钟后，我的手机会发出响亮的叮当作响的警报声；十分钟后，另一个闹钟就会响起。

When my ability to out-sleep all three finally wore off, I would stagger to my feet and immediately douse myself with enough caffeine to kill a small herd of cows. I lived on the permanent cliff-edge of exhaustion.

当我比这三个人都睡得更好的能力最终消失时，我会踉踉跄跄地站起来，立即给自己泼上足够的咖啡因来杀死一小群牛。我永远生活在疲惫的悬崖边上。

In Provincetown, when night fell, I would return to my little rooms to find there was no noise to rouse me and no portal to let in the wider world. I would go to lie in my bedroom, where the only source of light was a small reading lamp next to a pile of books.

在普罗温斯敦，当夜幕降临时，我会回到我的小房间，发现没有噪音唤醒我，也没有门户让我进入更广阔的世界。我会躺在卧室里，唯一的光源就是一堆书旁边的一盏小台灯。

I would lie there reading and feel the paroxysms of the day slowly wend their way out of my body as I gently eased out of consciousness. I realised I had left my melatonin unused in the bathroom cabinet.

我会躺在那里读书，随着我慢慢地失去知觉，感觉白天的阵痛慢慢地从我的身体中消失。我意识到我把未使用的褪黑激素留在了浴室柜子里。

One day I woke up without any alarms after sleeping for nine hours and realised that I didn't want any coffee. This was such an alien sensation that it made me stop for a moment and stand there in my boxer shorts in the kitchen in front of the unboiling kettle, staring at it.

有一天，我睡了九个小时后毫无闹钟地醒来，意识到我不想喝咖啡。这种感觉是如此陌生，让我停了下来，穿着平角短裤站在厨房里未烧开的水壶前，盯着它。

Then it finally occurred to me what I was feeling – I had awoken from

my sleep feeling fully refreshed. My body didn't feel heavy. I was alert. As the weeks passed, I realised that I felt like this every day now.

然后我终于意识到我的感受是什么——我从睡梦中醒来，感觉神清气爽。我的身体并不感到沉重。我很警惕。几周过去了，我意识到我现在每天都有这样的感觉。

The last time I remembered feeling like this was when I was a child.

我记得最后一次有这样的感觉是在我还是个孩子的时候。

For a long time, I had been trying to live by the rhythms of machines – going endlessly, day or night, until finally the battery conked out. Now I was living by the rhythm of the sun.

很长一段时间以来，我一直试图按照机器的节奏生活——无论白天还是黑夜，没完没了地运转，直到最后电池耗尽。现在我按照太阳的节奏生活。

As the sky went dark, I gradually wound down and finally rested, and when the sun came up, I woke naturally.

天色渐渐暗下来，我渐渐放松下来，终于休息了，当太阳升起时，我自然醒了。

This was making something shift in my understanding of my body. I could see now it craved far more sleep than I normally allowed it, and when sleep came without any chemical nudging, my dreams were more vivid. It was as though my body and my mind were unclenching, and then replenishing.

这让我对自己身体的理解发生了一些变化。我现在可以看到，它渴望的睡眠比我平时允许的要多得多，当没有任何化学物质推动的情况下入睡时，我的梦会更加生动。就好像我的身体和思想都在放松，然后又重新补充。

I wondered if this was playing a role in why I was able to think more clearly, and for much longer stretches, than I had for years.

我想知道这是否是我能够比多年来思考得更清晰、思考时间更长的原因之一。

I decided to explore the best scientific evidence about how the mysterious long stretches of unconsciousness our bodies crave – and that we so often deny them – might affect our ability to pay attention.

我决定探索最好的科学证据，以了解我们的身体渴望的神秘的长时间无意识（而我们经常否认它们）可能会影响我们的注意力能力。



In 1981, in a lab in Boston, a young research scientist was keeping people awake all through the night and all through the following day, in long, yawn-strewn stretches. His job was to make sure they stayed conscious and, as he did it, to give them tasks to carry out.

1981 年，在波士顿的一个实验室里，一位年轻的研究科学家让人们整夜和第二天都保持清醒，长时间地打哈欠。他的工作是确保他们保持清醒，并在他这样做时给他们布置任务。

They had to add up numbers, and then sort cards into different groups, and then take part in memory tests. For example, he would show them a picture, then take it away, and ask: what colour was the car in the picture I just showed you? Charles Czeisler – a tall, long-limbed man with wire-framed glasses and a deep voice – had, until this moment, never been interested in studying sleep. He had been taught in his medical training that when you are asleep, you are mentally ‘switched off’.

他们必须将数字相加，然后将卡片分成不同的组，然后参加记忆测试。比如，他会给他们看一张照片，然后把它拿开，然后问：我刚才给你看的照片里的车是什么颜色的？查尔斯·切斯勒（Charles Czeisler）——一个身材高大、四肢修长、戴着金属框眼镜、声音低沉的男人——直到此时为止，从未对研究睡眠感兴趣。他在医学训练中被告知，当你睡着时，你的精神状态会“关闭”。

This is how lots of us see sleep – as a purely passive process, a mental dead zone in which nothing of consequence happens. Who, he shrugged, would want to study switched-off people?

这就是我们很多人对睡眠的看法——睡眠是一个纯粹被动的过程，是一个心理死区，在这个过程中不会发生任何后果。他耸耸肩，谁会愿意研究那些与外界隔绝的人呢？

He was researching something he thought was much more important – it was a technical investigation of what time of day certain specific hormones are released in the human body. This required keeping people awake.

他正在研究一些他认为更重要的事情——这是一项关于一天中特定激素在人体内释放的时间的技术调查。这需要让人们保持清醒。

But as the days and nights went on, Charles couldn't help but notice something. When people are kept awake, 'One of the first things to go is the ability to focus our attention,' he told me, in a teaching room at Harvard.

但随着日日夜夜的流逝，查尔斯忍不住注意到了一些事情。当人们保持清醒时，“首先要做的就是集中注意力的能力，”他在哈佛大学的一间教室里告诉我。

He had been giving his test subjects really basic tasks, but with each hour that passed, they were losing their ability to carry them out. They couldn't remember things he'd just told them or focus enough to play very simple card games. He told me: 'I was just stunned by how performance would deteriorate. It's one thing to say that the average performance on a memory task would be 20 percent worse, or 30 percent worse.

他一直在给他的测试对象布置非常基本的任务，但随着时间的流逝，他们正在失去执行这些任务的能力。他们记不住他刚刚告诉他们的事情，也无法集中注意力去玩非常简单的纸牌游戏。他告诉我：“我对绩效的恶化感到震惊。内存任务的平均性能会下降 20% 或 30% 是一回事。

But it's another thing to say that your brain is so sluggish that it takes ten times longer for your brain to reply to something.' As people stayed awake, it seemed their ability to focus fell off a cliff.

但如果说你的大脑反应迟钝，以至于你的大脑需要十倍的时间才能做出反应，那就是另一回事了。”当人们保持清醒时，他们的注意力似乎就从悬崖上掉下来了。

In fact, if you stay awake for nineteen hours straight, you become as cognitively impaired – as unable to focus and think clearly – as if you

had got drunk.

事实上，如果你连续十九个小时保持清醒，你就会出现认知障碍——无法集中注意力和清晰思考——就像喝醉了一样。

He found that when they were kept awake for one whole night and continued walking about the next day, instead of taking a quarter of a second to respond to a prompt, the participants in his experiment were taking four, five or six seconds. 'It's kind of amazing,' he said.

他发现，当他们整夜保持清醒并在第二天继续行走时，实验参与者不再需要四分之一秒的时间来响应提示，而是需要四、五或六秒的时间。“这有点令人惊奇，”他说。

Charles was intrigued. Why would this be? He switched to studying sleep, and over the next forty years he would go on to become one of the leading figures in the world on this question, making several key breakthroughs.

查尔斯很感兴趣。为什么会这样呢？他转而研究睡眠，在接下来的四十年里，他成为了这个问题上的世界领军人物之一，并取得了多项关键突破。

He runs the unit on sleep problems at one of the major hospitals in Boston, teaches at Harvard Medical School, and advises everyone from the Boston Red Sox to the US Secret Service.

他在波士顿一家主要医院负责睡眠问题科室的管理，在哈佛医学院任教，并为从波士顿红袜队到美国特勤局的所有人提供建议。

He came to believe that, as a society, we are currently getting sleep all wrong – and it is ruining our focus.

他开始相信，作为一个社会，我们目前的睡眠方式完全错误——这正在破坏我们的注意力。

With each passing year, he warned, this has become more urgent. Today 40 percent of Americans are chronically sleep-deprived, getting less than the necessary minimum of seven hours a night. In Britain, an incredible 23 percent are getting less than five hours a night.

他警告说，随着时间的推移，这一问题变得更加紧迫。如今，40% 的美国人长期睡眠不足，每晚睡眠时间少于必要的最低七小时。在英国，

高达 23% 的人每晚的睡眠时间不足 5 小时。

Only 15 percent of us wake up from our sleep feeling refreshed. This is new. Since 1942, the average amount of time a person sleeps has been slashed by an hour a night. Over the past century, the average child has lost eighty-five minutes of sleep every night.

只有 15% 的人从睡眠中醒来时感觉神清气爽。这是新的。自 1942 年以来，一个人每晚的平均睡眠时间减少了一个小时。在过去的一个世纪里，平均每个孩子每晚睡眠时间减少了八十五分钟。

There's a scientific debate about the precise scale of our sleep loss, but the National Sleep Foundation has calculated that the amount of sleep we get has dropped by 20 percent in just a hundred years.

关于睡眠损失的精确程度存在科学争论，但国家睡眠基金会计算出，我们的睡眠时间在短短一百年内减少了 20%。

One day Charles had an idea. He wondered if, when you are tired, you begin to experience what he called 'attentional blinks'. This is where, initially for just a fraction of a second, you lose your ability to pay attention. To see if this was true, he started to study both alert and tired people using sophisticated technology that can track their eyes to see what they are focusing on – and at the same time, it can also scan your brain, to see what is happening there. He discovered something remarkable.

有一天，查尔斯有了一个主意。他想知道，当你累了时，你是否会开始经历他所说的“注意力眨眼”。在这里，最初只有一瞬间，你会失去注意力。为了看看这是否属实，他开始使用先进的技术来研究警觉和疲倦的人，这些技术可以跟踪他们的眼睛，看看他们在关注什么，同时，它还可以扫描你的大脑，看看正在发生什么那里。他发现了一些非凡的事情。

As you become tired, your attention will indeed blink out, for a simple reason. People think you're either awake or asleep, he told me, but he found that even if your eyes are open and you are looking around you, you can lapse – without knowing it – into a state called 'local sleep'. This is where 'part of the brain is awake, and part of the brain is asleep'.

当你变得疲倦时，你的注意力确实会消失，原因很简单。他告诉我，人们认为你要么醒着，要么睡着，但他发现，即使你睁着眼睛，环顾四周，你也可能在不知不觉中陷入一种称为“局部睡眠”的状态。这就是“大脑的一部分是醒着的，而大脑的一部分是睡着的”。

(It's called local sleep because the sleep is local to one part of the brain.) In this state, you believe you are alert and mentally competent – but you aren't.

（这被称为局部睡眠，因为睡眠只发生在大脑的某一部分。）在这种状态下，你认为自己很警觉并且精神上有能力——但事实并非如此。

You are sitting at your desk and you look awake, but parts of your brain are asleep, and you are not able to think in a sustained way. When he studied people in this state, he found ‘amazingly, sometimes their eyes were open, but they couldn't see what was in front of them’.

你坐在办公桌前，看上去很清醒，但你大脑的某些部分却在睡觉，你无法持续思考。当他研究处于这种状态的人时，他发现“令人惊讶的是，有时他们的眼睛是睁着的，但他们看不到面前的东西”。

The effects of sleep deprivation, Charles found, are especially terrible for children. Adults usually respond by becoming drowsy, but kids usually respond by becoming hyperactive.

查尔斯发现，睡眠不足对儿童的影响尤其严重。成年人通常会变得昏昏欲睡，但孩子们通常会变得过度活跃。

He said: ‘We're chronically sleep-depriving them, so it's no shock they're exhibiting all the symptoms of sleep deficiency – the first and foremost of which is the [in]ability to pay attention.’

他说：“我们长期剥夺他们的睡眠，所以他们表现出睡眠不足的所有症状也就不足为奇了——首要的就是无法集中注意力。”

There has now been a lot of scientific investigation into this, and there's a broad scientific consensus that if you sleep less, your attention will likely suffer. I went to the University of Minneapolis to interview professor of neuroscience and psychology Roxanne Prichard, who has produced some cutting-edge work on these questions. When she started teaching college students full-time in 2004, the first thing that struck her, she told me, was ‘just how exhausted young adults

were’.

现在对此进行了大量的科学研究，并且有一个广泛的科学共识：如果你睡眠不足，你的注意力可能会受到影响。我前往明尼阿波利斯大学采访了神经科学和心理学教授 Roxanne Prichard，她在这些问题上发表了一些前沿的研究成果。她告诉我，当她 2004 年开始全职教授大学生时，第一个让她震惊的事情是“年轻人是多么疲惫”。

They would often fall asleep the moment the lecture-theatre lights were dimmed, and they were visibly struggling to stay awake and focused on anything. She began to study how much sleep they were getting.

他们经常会在演讲厅灯光一暗的时候就睡着了，而且他们显然很难保持清醒并专注于任何事情。她开始研究他们的睡眠时间。

She discovered that on average, a typical student has the same sleep quality as an active-duty soldier or a parent of a newborn baby. As a result, the majority of them were ‘constantly fighting off this drive to sleep ... They’re not able to access their neural resources.’

他发现，平均而言，一个典型的学生的睡眠质量与现役士兵或新生儿的父母相同。结果，他们中的大多数人“不断地抵制这种睡觉的冲动.....他们无法访问他们的神经资源。”

She decided to teach them the science of why their bodies need sleep – but she found herself in a strange position. The students knew they were bone-tired, but ‘the problem is – they’ve been accustomed to that since puberty, basically’.

她决定教他们科学地了解为什么他们的身体需要睡眠——但她发现自己处于一个奇怪的境地。学生们知道他们已经筋疲力尽，但“问题是——基本上从青春期开始，他们就已经习惯了”。

They have seen their parents and grandparents chronically sleep-depriving themselves too. ‘They’ve grown up being accustomed to being exhausted and trying to medicate that away [with caffeine or other stimulants] as a state of normal.

他们也看到自己的父母和祖父母也长期睡眠不足。“他们在成长过程中已经习惯了疲惫，并试图通过药物（咖啡因或其他兴奋剂）来消除这

种疲劳，将其视为正常状态。”

So I'm fighting against a current that says it's normal to be exhausted all the time.' She started to show them some experiments. You can test the time it takes for a person to react to something – a picture that changes on a screen, say, or a ball that's thrown to them.

所以我正在与一种潮流作斗争，这种潮流认为一直精疲力尽是正常的。”她开始向他们展示一些实验。你可以测试一个人对某件事做出反应所需的时间——比如屏幕上变化的图片，或者扔给他们的球。

'The people with the quickest reaction times are the ones sleeping the most,' she shows them – and the less they sleep, the less they see or react.

她向他们展示：“反应速度最快的人就是睡得最多的人。”他们睡得越少，看到的東西或反应就越少。

This is just one way, of many, that shows that 'you are more efficient when you are rested – that it takes you less time to do things. That you don't need to have six screens or tabs open when you're doing your homework just to keep yourself awake.'

这只是众多方法中的一种，它表明“当你休息时，你会更有效率——你做事的时间会更少”。当你做作业时，你不需要打开六个屏幕或标签来让自己保持清醒。

At first, when I talked with Charles and Roxanne and other sleep experts, I thought – yes, this is bad, but they are talking about really exhausted people, an outlying group of the truly knackered.

起初，当我与查尔斯、罗克珊和其他睡眠专家交谈时，我想——是的，这很糟糕，但他们谈论的是真正精疲力尽的人，一群真正精疲力尽的边缘人。

But they kept explaining to me that it only takes a small amount of sleep loss for these negative effects to kick in. Roxanne showed me that if you stay awake for eighteen hours – so you woke up at 6 a.m.

但他们一直向我解释，只需要少量的睡眠不足就会产生这些负面影响。罗克珊向我展示，如果你保持清醒状态十八个小时，那么你会在早

上 6 点醒来。

and went to sleep at midnight – by the end of the day, your reactions are equivalent to if you had 0.05 percent blood alcohol.

并在午夜入睡——到一天结束时，您的反应相当于血液中酒精浓度为 0.05%。

She said: ‘Stay up another three hours, and you’re [the equivalent of being] legally drunk.’ Charles explained: ‘Many people say, “Well, I don’t stay up all night, so I’m fine,” but in fact, if you miss a couple of hours sleep every night and you do this night after night, within a week or two, you’re at the same level of performance and impairment as you would be staying up all night.

她说：“再熬三个小时，你就[相当于]合法地喝醉了。”查尔斯解释说：“很多人说，“好吧，我不会熬夜，所以我很好，但事实上，如果你每晚少睡几个小时，并且一夜又一夜地这样做，在一两周内，你的表现和损伤程度将与熬夜时的水平相同。

Everybody falls apart with two nights of missed sleep – or you can get to that same point by sleeping four or five hours a night and going for a couple of weeks.’ As he said this, I remembered: 40 percent of us live on the brink of that.

每个人都会因为两个晚上没睡而崩溃——或者你可以通过每晚睡四五个小时并连续几个星期来达到同样的目的。”当他说这句话时，我记得：我们中有 40% 的人生活在睡眠不足的情况下。边缘。

‘If you’re not sleeping well, your body interprets that as an emergency,’ Roxanne said. ‘You can deprive yourself of sleep and live. We could never raise children if we couldn’t drop down on our sleep, right? We’d never survive hurricanes. You can do that – but it comes at a cost.

“如果你睡得不好，你的身体就会将其视为紧急情况，”罗克珊说。‘你可以剥夺自己的睡眠并生活。如果我们不能好好睡觉，我们就永远无法养育孩子，对吗？我们永远无法在飓风中幸存。你可以做到这一点——但这是有代价的。

The cost is [that] your body shifts into the sympathetic nervous system zone – so your body is like, “Uh oh, you’re depriving yourself of sleep, must be an emergency, so I’m going to make all these physiological changes to prepare yourself for that emergency. Raise your blood pressure. I’m going to make you want more fast food, I’m going to make you want more sugar for quick energy. I’m going to make your heart-rate [rise]” ... So it’s like all this shifts, to say – I’m ready.’ Your body doesn’t know why it’s staying awake.

代价是你的身体转移到交感神经系统区域 - 所以你的身体就像，“呃哦，你剥夺了自己的睡眠，一定是紧急情况，所以我要做出所有这些生理改变为紧急情况做好准备。提高你的血压。我会让你想要更多的快餐，我会让你想要更多的糖来快速补充能量。我会让你的心率[上升]”.....所以这一切都在变化，也就是说——我准备好了。”你的身体不知道为什么它会保持清醒。

‘Your brain doesn’t know you’re sleep-deprived because you’re goofing off and watching *Schitt’s Creek*, right? It doesn’t know why you’re not sleeping – but the net effect is a physiological sort of alarm bell.’

“你的大脑不知道你睡眠不足，因为你正在偷懒地看《Schitt's Creek》，对吧？”它不知道你为什么睡不着，但最终的效果是一种生理上的警钟。

In this bodily emergency, your brain doesn’t just cut back on immediate short-term focus. It cuts off resources to other longer-term forms of focus too. When we sleep, our minds start to identify connections and patterns from what we’ve experienced during the day.

在这种身体紧急情况下，你的大脑不仅仅会减少当前的短期注意力。它还切断了其他长期关注形式的资源。当我们睡觉时，我们的大脑开始从我们白天经历的事情中识别联系和模式。

This is one of the key sources of our creativity – it’s why narcoleptic people, who sleep a lot, are significantly more creative. Sleep deprivation damages memory as well.

这是我们创造力的关键来源之一——这就是为什么睡眠时间长的嗜睡症患者的创造力明显更高。睡眠不足也会损害记忆力。

When you go to bed tonight, your mind will start to transfer the things you have learned during the day into your long-term memory. Xavier Castellanos, who I interviewed at New York University, where he is a professor of child and adolescent psychiatry, explained to me that you can get rats to learn a maze, and that night, you can monitor what happens in their brains as they sleep. What you find is that they are retracing their steps in the maze, one by one, encoding them into their long-term memory.

当你今晚上床睡觉时，你的大脑会开始将白天学到的东西转移到你的长期记忆中。我在纽约大学采访了泽维尔·卡斯特拉诺斯（Xavier Castellanos），他是该校的儿童和青少年精神病学教授，他向我解释说，你可以让老鼠学习走迷宫，那天晚上，你可以监测它们睡觉时大脑中发生的情况。你会发现，他们正在迷宫中一步一步地回溯自己的脚步，并将其编码到长期记忆中。

The less you sleep, the less this happens, and the less you will be able to recall.

你睡得越少，这种情况就越少发生，你能回忆起的事情就越少。

These effects are especially powerful for children. If you deprive kids of sleep, they begin to show attention problems rapidly, and often go into a manic state.

这些影响对于儿童来说尤其强大。如果你剥夺孩子的睡眠，他们就会开始迅速表现出注意力问题，并且经常进入躁狂状态。



For years I believed I could cheat my way into getting all the benefits of proper sleep through technical fixes. The most obvious is caffeine. I once heard an almost certainly apocryphal story about Elvis – that in the last years of his life, his doctor would wake him up by injecting caffeine directly into his veins. When I heard this, I didn't think – how awful. I thought – where's that doctor been all my life?

多年来，我相信我可以通过技术修复来获得适当睡眠的所有好处。最明显的是咖啡因。我曾经听过一个关于埃尔维斯的几乎可以肯定是杜撰的故事——在他生命的最后几年，他的医生会通过直接向他的静脉注射咖啡因来唤醒他。当我听到这句话时，我并没有想到——多么可怕。我想——我一生中那个医生在哪里？

For years I reasoned – okay, I don't sleep enough, but I make up for it with coffee, Coke Zero and Red Bull. But Roxanne explained to me what I was really doing when I drank all this. Throughout the day, in your brain, a chemical is building up called adenosine, and it signals to you when you are sleepy. Caffeine blocks the receptor that picks up on the level of adenosine. 'I liken it to putting a Post-it note over your fuel-gauge indicator. You're not giving yourself more energy – you're just not realising how empty you are.

多年来我一直在思考——好吧，我睡眠不足，但我会用咖啡、零可乐和红牛来弥补。但罗克珊向我解释了当我喝下所有这些时我到底在做什么。一整天，你的大脑中都会积聚一种叫做腺苷的化学物质，当你困倦时它会向你发出信号。咖啡因会阻断接收腺苷水平的受体。“我把它比作在你的电量指示器上贴一张便利贴。你并没有给自己更多的能量——你只是没有意识到自己有多空虚。

When the caffeine wears off, you're doubly exhausted.'

当咖啡因消失时，你会倍感疲惫。

The less you sleep, the more the world blurs in every way – in your immediate focus, in your ability to think deeply and make connections, and in your memory. Charles told me that even if nothing else was changing in our society, this decline in how much we sleep is on its own enough to prove that our crisis in focusing and paying attention is real. 'It's very sad to watch this play out and not be able to stop this,' he said.

你睡得越少，世界在各个方面就越模糊——你眼前的焦点、你深入思考和建立联系的能力，以及你的记忆。查尔斯告诉我，即使我们的社会没有发生任何其他变化，我们睡眠时间的减少本身就足以证明我们在集中注意力方面的危机是真实存在的。他说，“看着这一切发生却无法阻止这一切，真是令人难过。”

'It's like watching a crash that's happening.'

“这就像看着正在发生的车祸一样。”

Every expert I spoke to said this transformation explains, in part, our declining attention. Dr Sandra Kooij is one of the leading experts on adult ADHD in Europe, and when I went to interview her in The

Hague, she told me bluntly: ‘Our Western society is a bit ADHD-ish because we’re all sleep-deprived ... It’s huge. And it means something for us. So we’re all in a hurry, we’re all impulsive, we’re easily irritated in traffic.

我采访过的每一位专家都表示，这种转变在一定程度上解释了我们关注度下降的原因。Sandra Kooij 博士是欧洲成人多动症方面的顶尖专家之一，当我去海牙采访她时，她直言不讳地告诉我：“我们的西方社会有点多动症，因为我们都睡眠不足……它超大。这对我们来说意义重大。所以我们都很忙，我们都很冲动，我们很容易在交通中烦躁。

You see it everywhere around you ... This has been studied and proven in laboratories: you think you’re thinking clearly, but you’re not. You’re much less clear than you could be.’ She added that ‘when we sleep better, a lot of problems get less – like mood disorders, like obesity, like concentration problems ... It repairs a lot of damage.’

你周围到处都可以看到它……这已经在实验室中得到了研究和证明：你认为你的思维清晰，但事实并非如此。她补充道，“当我们睡得更好时，很多问题就会减少——比如情绪障碍、肥胖、注意力不集中……它可以修复很多损伤。”



As I learned all this, I had some obvious questions. The first was – why does our lack of sleep damage our ability to focus so much? Surprisingly, this is a relatively new research question. Roxanne told me: ‘In 1998, when I chose [the subject of sleep] to focus on for my dissertation, there wasn’t a lot of research on what sleep was for.

当我了解这一切时，我有一些明显的问题。第一个是——为什么睡眠不足会严重损害我们的注意力？令人惊讶的是，这是一个相对较新的研究问题。罗克珊告诉我：“1998 年，当我选择[睡眠主题]作为我的论文重点时，并没有很多关于睡眠用途的研究。

We knew what it was and we all do it ... and it’s kind of mysterious. You’re spending a third of your life unconscious, not engaging with the world ... It was just this mystery – it seems like a waste of resources.’

我们知道那是什么，我们都这么做了……这有点神秘。你一生的三分之一时间都在无意识中度过，没有与世界接触……这就是一个谜——这似乎是一种资源的浪费。

Charles had been told when he was a young man there was no point studying sleep because it's a passive process – but in fact, he learned, sleep is an incredibly active process.

查尔斯年轻时就被告知研究睡眠是没有意义的，因为它是一个被动的过程——但事实上，他了解到，睡眠是一个极其活跃的过程。

When you go to sleep, all sorts of activities take place in your brain and body – and these are necessary for you to be able to function and focus. One of the things that happens is that during sleep, your brain cleans itself of waste that has accumulated during the day.

当您入睡时，您的大脑和身体会发生各种活动 - 这些对于您能够正常工作和集中注意力是必要的。发生的事情之一是，在睡眠期间，您的大脑会自行清除白天积累的废物。

‘During slow-wave sleep, your cerebral spinal fluid channels open up more and remove metabolic waste from your brain,’ Roxanne explained to me. Every night, when you go to sleep, your brain is rinsed with a watery fluid.

“在慢波睡眠期间，你的脑脊髓液通道会打开更多，并清除大脑中的代谢废物，”罗克珊向我解释道。每天晚上，当你入睡时，你的大脑都会被水状液体冲洗。

This cerebrospinal fluid washes through your brain, flushing out toxic proteins and carrying them down to your liver to get rid of them. ‘So when I’m talking to college students, I call this brain-cell poop.

这种脑脊液会冲洗您的大脑，冲走有毒蛋白质，并将它们带到肝脏以清除它们。“所以当我和大学生交谈时，我称之为脑细胞粪便。

If you can’t focus well, it might be you have too much brain-cell poop circulating.’ That can explain why, when you are tired, ‘you get a hung-over sort of feeling’ – you are literally clogged up with toxins.

如果你不能很好地集中注意力，可能是因为你的脑细胞粪便循环过

多。”这可以解释为什么当你疲倦时，“你会有一种宿醉的感觉”——你实际上是被毒素。

This positive kind of brainwashing can only happen when you are asleep. Dr Maiken Nedergaard, at the University of Rochester, told one interviewer: ‘The brain only has limited energy at its disposal, and it appears that it must choose between two different functional states – awake and aware, or asleep and cleaning up.

这种积极的洗脑只能在你睡着的时候发生。罗切斯特大学的麦肯·内德加德博士告诉一位采访者：“大脑可支配的能量有限，它似乎必须在两种不同的功能状态之间进行选择——清醒和有意识，或者睡眠和清理。”

You can think of it as like having a house party. You can either entertain the guests or clean up the house, but you can’t really do both at the same time.’ A brain that hasn’t been through this necessary cleaning process becomes more clogged and less able to concentrate.

您可以将其视为举办家庭聚会。你可以招待客人，也可以打扫房子，但你不能真正同时做这两件事。”如果大脑没有经过这个必要的清洁过程，就会变得更加堵塞，更难以集中注意力。

Some scientists suspect this is why people who are under-slept are at greater risk, in the long-term, of developing dementia. When you are sleeping, Roxanne says, ‘You’re repairing.’

一些科学家怀疑这就是为什么睡眠不足的人从长远来看患痴呆症的风险更大。当你睡觉时，罗克珊说，“你正在修复。”

Another thing that happens during sleep is that your energy levels are restored and replenished.

睡眠期间发生的另一件事是您的能量水平得到恢复和补充。

Charles told me that ‘the prefrontal cortex is the judgement area of the brain, and that seems to be particularly sensitive to sleep loss ... You see that, with even one night of sleep loss, that area of the brain is just not utilising glucose, which is the main energy source of the brain.

查尔斯告诉我，“前额皮质是大脑的判断区域，它似乎对睡眠不足特别敏感……你会发现，即使一晚睡眠不足，大脑的该区域也不会利用葡萄糖，这是大脑的主要能量来源。

It's sort of going stone cold.' Without renewing your sources of energy, you can't think clearly.

如果不更新你的能量来源，你就无法清晰地思考。

But for me, the most intriguing process that happens when we sleep is that we dream – and this, I learned, also performs an important function. In Montreal, I went to interview Tore Nielsen, who is a professor of psychiatry there. He often tells people he has a 'dream job' and asks them to guess what it is. After they've run through the list – racing-car driver? Chocolate-taster? – he tells them: he runs the Dream Lab at the University of Montreal.

但对我来说，我们睡觉时发生的最有趣的过程是我们做梦——据我所知，这也发挥着重要作用。在蒙特利尔，我采访了托雷·尼尔森（Tore Nielsen），他是那里的精神病学教授。他经常告诉人们他有一份“梦想的工作”，并要求他们猜这是什么。当他们浏览完名单后——赛车手？巧克力品尝师？– 他告诉他们：他在蒙特利尔大学经营梦想实验室。

He told me that some scientists in the field believe that 'dreaming somehow helps you to adapt emotionally to waking events'. When you dream, you can revisit stressful moments, but without stress hormones flooding your system.

他告诉我，该领域的一些科学家认为，“做梦在某种程度上可以帮助你情感上适应清醒时发生的事情”。当你做梦时，你可以重温压力时刻，但压力荷尔蒙不会充斥你的系统。

Over time, those scientists believe this can make it easier to handle stress – which we know makes it easier to focus. Tore emphasises that there seems to be some evidence supporting this theory and some contradicting it, and we need to know more to be sure.

随着时间的推移，这些科学家相信这可以让我们更容易应对压力——我们知道这可以让我们更容易集中注意力。托尔强调，似乎有一些证据支持这一理论，也有一些证据与之相矛盾，我们需要了解更多才能确定。

But if it is correct, then we have a problem – because as a society, we are dreaming less and less. Dreams occur most during the stage known as rapid-eye movement (REM) sleep. Tore told me: 'The

longest and most intense REM periods are the ones that occur toward the seven- or eight-hour mark of the sleep cycle.

但如果它是正确的，那么我们就有问题了——因为作为一个社会，我们的梦想越来越少。梦最常发生在快速眼动 (REM) 睡眠阶段。托尔告诉我：“最长、最强烈的快速眼动睡眠期是在睡眠周期的七到八小时内发生的。

So if you're curtailing your sleep down to five or six hours, chances are good that you're not getting those long, intense REM periods.' As he said this, I wondered: What does it mean to be a society and culture so frantic that we don't have time to dream?

因此，如果你将睡眠时间减少到五到六个小时，那么你很可能无法获得长时间、强烈的快速眼动睡眠时间。”当他这么说时，我想知道：作为一个社会和文化意味着什么如此疯狂以至于我们没有时间做梦？



As we find ourselves wired and unable to sleep, more and more of us are turning to drugs to knock ourselves out – whether it's melatonin or alcohol or Ambien. Nine million Americans – 4 percent of adults – are using prescription sleeping pills, and vastly more are using over-the-counter sleep aids, like I did for many years.

当我们发现自己无法入睡时，越来越多的人开始求助于药物来让自己昏昏欲睡——无论是褪黑激素、酒精还是安必恩。900 万美国人（占成年人的 4%）正在使用处方安眠药，而且更多的人正在使用非处方安眠药，就像我多年来所做的那样。

But Roxanne told me bluntly: 'If you chemically induce sleep, it's not the same kind of sleep.' Remember – sleep is an active process, in which your brain and body do lots of things. Many of these things don't happen, or happen far less, in drugged or drunk sleep.

但罗克珊直言不讳地告诉我：“如果你用化学方法诱导睡眠，那就不是同一种睡眠。”请记住，睡眠是一个活跃的过程，在这个过程中，你的大脑和身体会做很多事情。在吸毒或醉酒的睡眠中，许多这样的事情不会发生，或者发生的次数要少得多。

The different ways of artificially inducing sleep can have different effects.

不同的人工诱导睡眠方式会产生不同的效果。

If you take 5 mg of melatonin – which is often a standard dose that’s sold over the counter in the US – Roxanne said you risk ‘blowing out your melatonin receptors’, which would make it harder to sleep without them.

Roxanne 表示，如果您服用 5 毫克褪黑激素（这通常是美国柜台上出售的标准剂量），您可能会面临“褪黑激素受体被破坏”的风险，如果没有它们，您将很难入睡。

Bigger effects kick in with the harder stuff.

越困难的事情就会产生越大的效果。

Of Ambien and the other prescribed sedatives, she warns: ‘Sleep is a really important balance of many, many neurotransmitters, and if you artificially ... pump up one, it changes the balance of that sleep.’ You will likely have less REM sleep, and fewer dreams, and so you lose all the benefits that come from this crucial stage.

关于安必恩和其他处方镇静剂，她警告说：“睡眠是许多神经递质之间非常重要的平衡，如果你人为地……增加其中一种，就会改变睡眠的平衡。”你的快速眼动睡眠可能会减少，梦想也更少，所以你就失去了这个关键阶段带来的所有好处。

You are likely to be groggy throughout the day – which is why sleeping pills increase your risk of death from all causes: you’re more likely to get into a car accident, for example.

您可能一整天都昏昏沉沉的——这就是为什么安眠药会增加您因各种原因死亡的风险：例如，您更有可能发生车祸。

‘If you’ve ever had surgery and recovered from that, like coming off anaesthesia,’ Roxanne said, you don’t say, ‘Oh, I feel so refreshed.’ Knocking yourself out is like taking a minor anaesthetic. Your body doesn’t rest and clean and refresh and dream like it needs to.

罗克珊说，“如果你曾经接受过手术并从中恢复过来，就像麻醉结束一

样，”你不会说，“哦，我感觉神清气爽。”让自己昏迷不醒就像服用了轻微的麻醉剂一样。你的身体没有像它需要的那样休息、清洁、恢复活力和做梦。

Roxanne told me that there are some legitimate uses for sleeping pills – for example, taking them for a short time after you’ve had a traumatic bereavement might be sensible.

罗克珊告诉我，安眠药有一些合法用途——例如，在经历痛苦的丧亲之痛后短时间服用安眠药可能是明智的。

But she warned ‘it’s definitely not the solution for insomnia,’ and that’s why doctors are not supposed to prescribe them over the long term.

但她警告说，“这绝对不是失眠的解决方案”，这就是为什么医生不应该长期开药的原因。



It’s a sign of how dysfunctional we have become when it comes to sleep that the people who should be warning us most about this crisis – doctors – are in fact required to become sleep-deprived to get their qualifications. As part of their medical training, doctors have to do gruelling twenty-four-hour shifts on call – they nickname it ‘doing a Jack Bauer’, after the TV show *24*, where Kiefer Sutherland can’t sleep because he’s chasing terrorists. This endangers their patients. But we have become a culture where even the people who should know best about sleep fetishise staying sleepless beyond the point of reason, just like the rest of us.

这表明我们在睡眠方面已经变得多么功能失调，最应该就这场危机向我们发出警告的人——医生——实际上被要求睡眠不足才能获得资格。作为医疗培训的一部分，医生们必须进行艰苦的二十四小时轮班，随叫随到——他们将这种做法戏称为“做杰克·鲍尔”，得名于电视节目《24小时》，其中基弗·萨瑟兰因为追捕恐怖分子而无法入睡。这危及他们的病人。但我们已经成为一种文化，即使是最了解睡眠的人也会像我们其他人一样，超出理性地失眠。



The second question I found myself asking was: Given that lack of sleep is so harmful, and at some level we all know it, why are we

doing it less? Why would we give up on one of our most basic needs?

我发现自己问的第二个问题是：既然睡眠不足如此有害，并且在某种程度上我们都知道这一点，为什么我们要少做呢？为什么我们要放弃最基本的需求之一？

There's a big scientific debate about this, and several factors seem to be having an effect. Some are going to come up later in this book. One of them – unexpectedly – is our relationship with physical light. Charles made some of the key breakthroughs on this. Until the nineteenth century, the lives of almost all humans were shaped primarily by the rise and fall of the sun.

对此存在着一场大的科学争论，并且有几个因素似乎产生了影响。有些内容将在本书稍后部分提到。其中之一——出乎意料的是——是我们与物理光的关系。查尔斯在这方面取得了一些关键突破。直到十九世纪，几乎所有人类的生活主要是由太阳的升起和落下决定的。

Our natural rhythms evolved to match it – we would get a rush of energy when it got light, and we would feel sleepy after it got dark. For almost all of human history, our ability to intervene in this cycle was pretty limited – we could light fires, but that was it.

我们的自然节律进化得与它相匹配——天亮时我们会精力充沛，天黑后我们会感到困倦。在几乎整个人类历史中，我们干预这个循环的能力相当有限——我们可以生火，但仅此而已。

As a result, humans evolved to be as sensitive to changes of light, Charles says, as algae and cockroaches. But suddenly, with the invention of the electric lightbulb, we gained the power to control the light we are exposed to – and this power has started to scramble our internal rhythms.

查尔斯说，因此，人类进化得像藻类和蟑螂一样对光线的变化敏感。但突然间，随着电灯泡的发明，我们获得了控制我们所接触到的光线的能力，而这种能力开始扰乱我们的内部节奏。

Here's a clear example. We evolved to get a rush of energy – a 'surge of waking drive', Charles says – when the sun began to set. This was very helpful to our ancestors.

这是一个明显的例子。当太阳开始落山时，我们进化到能获得一股能量——查尔斯说，这是一种“清醒动力的激增”。这对于我们的祖先来说

是非常有帮助的。

Imagine you're out camping, and the sun starts to fall – it's very useful if you then feel a rush of wakefulness, because then you'll be able to set up your tent before it's too dark to do it.

想象一下你在外面露营，太阳开始落山——如果你感到一阵清醒，这会非常有用，因为这样你就可以在天黑之前搭起帐篷。

In the same way, our ancestors got a fresh rush of energy just as the light waned so they could safely get back to their tribe and finish the things they needed to do that day. But now we control the light. We decide when sunset happens. So if we keep bright lights switched on right until the moment we decide to go to sleep, or we watch TV on our phones in bed, when we switch them off we accidentally trigger a physical process – our bodies think this sudden waning of the light is the arrival of sunset, so they release a rush of fresh energy to help you get back to your cave.

同样，我们的祖先在光线减弱时获得了新鲜的能量，这样他们就可以安全地返回部落并完成当天需要做的事情。但现在我们控制了光线。我们决定日落何时发生。因此，如果我们一直开着明亮的灯光直到我们决定睡觉，或者我们在床上用手机看电视，当我们关掉它们时，我们会意外地触发一个物理过程——我们的身体会认为光线突然减弱是日落的到来，所以他们释放出一股新鲜的能量来帮助你回到你的洞穴。

'Now this surge of waking drive, instead of happening at three or four o'clock in the afternoon before the sun sets at six, is now happening at ten, eleven, midnight,' Charles says. 'You have the surge of waking energy at the time you're deciding whether to go to sleep.'

查尔斯说：“现在这种清醒时的动力激增不再发生在下午六点太阳落山前的下午三点或四点，而是发生在午夜十点、十一或午夜。”“当你决定是否睡觉时，你的清醒能量会激增。

Now you get up in the morning; you feel like you're going to die. You swear to God that you're going to get more sleep the next day, but you're not tired the next evening,' because you've watched more TV on your laptop in bed, and triggered the same process all over again.

现在你早上起床；你感觉自己快要死了。你向上帝发誓，第二天你会

睡得更多，但第二天晚上你并不累，”因为你在床上用笔记本电脑看了更多电视，并再次触发了相同的过程。

‘The surge is very powerful, and so people are like, “I’m fine,” and the morning is a blur that they’ve forgotten.’ Charles believes that – as he said to another interviewer – ‘every time we turn on a light, we are inadvertently taking a drug that affects how we will sleep.’ This goes on day after day.

“这种激增非常强大，所以人们会说，‘我很好’，而早上的感觉却是一片模糊，他们已经忘记了。”查尔斯相信——正如他对另一位采访者所说——“每次我们打开电源时” “一盏灯，我们就无意中服用了一种影响我们睡眠的药物。”这种情况日复一日地发生。

‘That’s a major contributing factor to this epidemic of sleep deficiency – because we’re exposing ourselves to light later and later,’ he explained.

“这是导致睡眠不足流行的一个主要因素——因为我们越来越晚地将自己暴露在光线下，”他解释道。

Indeed, 90 percent of Americans look at a glowing electronic device in the hour before they go to bed – triggering precisely this process.

事实上，90% 的美国人在睡觉前一小时都会看发光的电子设备——这正是触发了这一过程。

We are now exposed to ten times the amount of artificial light that people were exposed to just fifty years ago.

我们现在接触到的人造光量是五十年前的十倍。

I wondered if one of the reasons why I slept so much better on Cape Cod was because I returned to something closer to this natural rhythm.

我想知道我在科德角睡得更好的原因之一是否是因为我回到了更接近这种自然节奏的状态。

When the sun sets on Provincetown, the town gets much darker, and by my beachhouse, there was almost no artificial light, barely even a

street lamp.

当太阳落在普罗温斯敦时，小镇变得更加黑暗，而我的海滨别墅附近几乎没有人造光，甚至连路灯都没有。

The orange haze of air pollution that lights up the sky in every place I have ever lived was gone, and there was only the gentle light of the moon and the stars.

在我居住过的每一个地方，照亮天空的橙色空气污染雾气都消失了，只有月亮和星星的柔和光芒。



But Charles told me you can only really understand our crisis of sleep if you understand it in a much bigger context. At first glance, he says, what we are doing is crazy: ‘We wouldn’t deprive children of nutrition. We wouldn’t think of doing that. Why are we depriving them of sleep?’ But it makes a dark kind of sense when you see it as part of a broader picture.

但查尔斯告诉我，只有在更大的背景下理解我们的睡眠危机，你才能真正理解它。他说，乍一看，我们所做的事情很疯狂：“我们不会剥夺孩子们的营养。”我们不会考虑这样做。我们为什么要剥夺他们的睡眠？”但是，当你将其视为更广阔的图景的一部分时，它就会产生一种黑暗的感觉。

In a society dominated by the values of consumer capitalism, ‘Sleep is a big problem,’ he told me. ‘If you’re asleep, you’re not spending money, so you’re not consuming anything.

在一个以消费资本主义价值观为主的社会中，“睡眠是一个大问题，”他告诉我。“如果你睡着了，你就不会花钱，所以你就不会消费任何东西。

You’re not producing any products.’ He explained that ‘during the last recession [in 2008]... they talked about global output going down by so many percent, and consumption going down.

你没有生产任何产品。”他解释说，“在上次经济衰退期间（2008年）.....他们谈到全球产出下降了很多百分比，消费也下降了。

But if everybody were to spend [an] extra hour sleeping [as they did in the past], they wouldn't be on Amazon. They wouldn't be buying things.' If we went back to sleeping a healthy amount – if everyone did what I did in Provincetown – Charles said 'it would be an earthquake for our economic system, because our economic system has become dependent on sleep-depriving people.

但如果每个人都多花一个小时睡觉（就像过去那样），他们就不会上亚马逊了。他们不会买东西。”如果我们回到健康的睡眠状态——如果每个人都像我在普罗温斯敦所做的那样——查尔斯说，“这对我们的经济体系来说将是一场地震，因为我们的经济体系已经变得依赖于睡眠-剥夺人们的权利。

The attentional failures are just roadkill. That's just the cost of doing business.' I only really understood how significant this point was towards the end of writing this book.

注意力不集中只会造成交通事故。这只是做生意的成本。’我直到写完这本书才真正理解这一点的重要性。



All this leads to one last big question about sleep – how do we solve this crisis? There are several layers to the solution. The first is personal and individual. As Charles explains, you need to radically limit your exposure to light before you go to sleep.

所有这些引出了关于睡眠的最后一个大问题——我们如何解决这场危机？解决方案有几个层次。第一个是个人的、个人的。正如查尔斯所解释的，您需要在睡觉前从根本上限制接触光线。

He believes you should have no sources of artificial light in your bedroom at all, and you should avoid the blue light of screens for at least two hours before you go to bed.

他认为卧室里根本不应该有人造光源，并且在睡觉前至少两个小时应避免屏幕的蓝光。

We also need, all the sleep experts told me, to have different relationships with our phones. Roxanne told me that to lots of us, 'It's like your baby, right? So as a new parent, you're like – I've got to be

vigilant for this thing. I've got to pay attention. I'm not sleeping as deeply.

所有睡眠专家告诉我，我们还需要与手机建立不同的关系。罗克珊告诉我，对我们很多人来说，‘这就像你的孩子，对吧？所以作为一个新父母，你会想——我必须对这件事保持警惕。我必须注意。我睡得没那么深。

Or you are like a firefighter who's listening for a call.' We're constantly a little tensed to see 'did something happen?' She says your phone should always recharge overnight in a different room, where you can't see or hear it.

或者你就像一个正在听电话的消防员。”我们总是有点紧张，想知道“发生了什么事情吗？”她说你的手机应该总是在另一个房间里过夜充电，在那里你看不到或听不到它。

Then you need to make sure your room is the right temperature – it should be cool, almost cold. This is because your body needs to cool its core to send you to sleep, and the harder that is, the longer it takes.

然后你需要确保你的房间温度合适——应该凉爽，几乎冷。这是因为你的身体需要冷却其核心才能让你入睡，而且越困难，需要的时间就越长。

These are helpful (and relatively well-known) tips – but, as every expert I spoke to acknowledged, they are not enough for most people. We live in a culture that is constantly amping us up with stress and stimulation.

这些都是有用的（而且相对众所周知的）技巧——但是，正如我采访过的每位专家都承认的那样，它们对于大多数人来说还不够。我们生活在一种不断给我们带来压力和刺激的文化中。

You can tell people all this, and explain the health benefits of a good long night in bed, and they will agree, and then they say, 'Do you want me to list everything I need to do in the next twenty-four hours? And you want me to spend nine hours sleeping too?'

你可以告诉人们这一切，并解释在床上度过一个美好的夜晚对健康的好处，他们会同意，然后他们说，‘你想让我列出在接下来的二十四小时内我需要做的所有事情吗？你还想让我睡九个小时吗？

As I learned about several of the things we need to do to improve our focus, I realised that we live in an apparent paradox. Many of the things we need to do are so obvious they are banal: slow down, do one thing at a time, sleep more.

当我了解到我们需要做的一些事情来提高我们的注意力时，我意识到我们生活在一个明显的悖论中。我们需要做的许多事情都是显而易见的，但却是平庸的：放慢速度，一次只做一件事，多睡觉。

But even though at some level we all know them to be true, we are in fact moving in the opposite direction: towards more speed, more switching, less sleep. We live in a gap between what we know we should do and what we feel we can do.

但即使在某种程度上我们都知道它们是正确的，但我们实际上正在朝着相反的方向前进：更快的速度、更多的转换、更少的睡眠。我们生活在我们知道应该做什么和我们感觉自己能做什么之间的差距中。

The key question, then, is: what's causing that gap? Why can't we do the obvious things that would improve our attention? What forces are stopping us? I spent a large part of the rest of my journey uncovering the answers.

那么，关键问题是：是什么造成了这种差距？为什么我们不能做一些明显的事情来提高我们的注意力呢？是什么力量在阻止我们？我在接下来的旅程中花了很大一部分时间来寻找答案。

Cause Four: The Collapse of Sustained Reading

4

4 原因四：持续阅读的崩溃

In the West End of Provincetown there's a gorgeous bookstore named Tim's Used Books. You walk in and you immediately inhale the tangy must that comes from having old books stacked everywhere. I went in almost every other day that summer to buy another book to read.

在普罗温斯敦西区有一家华丽的书店，名为蒂姆二手书店。当你走进去时，你会立即吸入来自到处堆放的旧书的浓郁气味。那年夏天我几乎每隔一天就去买另一本书来读。

There was a young woman who worked at the cash register who was really smart, and I took to chatting with her. I noticed that every time I went in, she was reading a different book – one day Vladimir Nabokov, another day Joseph Conrad, another day Shirley Jackson. Wow, I said, you read fast. Oh, she replied, I don't. I can only read the first chapter or two of a book. I asked: Really? Why? She said: I guess I can't focus.

有一位在收银台工作的年轻女士，她非常聪明，我开始和她聊天。我注意到每次我进去时，她都在读一本不同的书——有一天是弗拉基米尔·纳博科夫，另一天是约瑟夫·康拉德，另一天是雪莉·杰克逊。哇，我说，你读得真快。哦，她回答说，我不知道。我只能读一本书的前两章。我

问：真的吗？为什么？她说：我想我无法集中注意力。

Here was an intelligent young woman with lots of time, surrounded by many of the best books ever written, and with a desire to read them – but she could only get through the first chapter or two, and then her attention pattered out, like a failing engine.

这是一位聪明的年轻女子，她有很多时间，周围有许多有史以来最好的书，并且渴望阅读它们——但她只能读完前一两章，然后她的注意力就消失了，就像发动机故障。

I have lost count of how many people I know who have told me this. When I first met him, David Ulin, who was a book critic and editor at the *Los Angeles Times* for more than thirty years, told me that he had lost his ability to read deeply over long periods, because whenever he tried to settle down, he kept being drawn back to the buzz of the online conversation. This is an incredibly smart man whose whole life had been books.

我已经记不清有多少认识的人告诉过我这件事了。当我第一次见到他时，大卫·乌林（David Ulin）在《洛杉矶时报》担任了三十多年的书评人和编辑，他告诉我，他已经失去了长期深入阅读的能力，因为每当他试图安定下来时，他总是被网上谈话的喧嚣所吸引。这是一个非常聪明的人，他的一生都是书本。

It was disconcerting.

这令人不安。

The proportion of Americans who read books for pleasure is now at its lowest level ever recorded. The American Time Use Survey – which studies a representative sample of 26,000 Americans – found that between 2004 and 2017 the proportion of men reading for pleasure had fallen by 40 percent, while for women, it was down by 29 percent.

以读书为目的的美国人比例目前处于有记录以来的最低水平。美国时间利用调查对 26,000 名美国人进行了代表性样本研究，结果发现，2004 年至 2017 年间，男性以阅读为乐的比例下降了 40%，而女性则下降了 29%。

The opinion-poll company Gallup found that the proportion of

Americans who never read a book in any given year tripled between 1978 and 2014. Some 57 percent of Americans now do not read a single book in a typical year.

民意调查公司盖洛普 (Gallup) 发现，从 1978 年到 2014 年，从未读过一本书的美国人比例增加了两倍。现在，大约 57% 的美国人在典型年份中一本书都没读过。

This has escalated to the point that by 2017, the average American spent seventeen minutes a day reading books and 5.4 hours on their phone. Complex literary fiction is particularly suffering.

这种情况已经升级到 2017 年，美国人平均每天花 17 分钟读书，花 5.4 小时玩手机。复杂的文学小说尤其受苦。

For the first time in modern history, less than half of Americans read literature for pleasure. It's been less well studied, but there seem to be similar trends in Britain and other countries: between 2008 and 2016 the market for novels fell by 40 percent.

现代历史上第一次，只有不到一半的美国人为了消遣而阅读文学。虽然对此的研究较少，但英国和其他国家似乎也存在类似的趋势：2008 年至 2016 年间，小说市场下降了 40%。

In one single year – 2011 – paperback fiction sales collapsed by 26 percent.

在 2011 年这一年里，平装小说销量暴跌了 26%。

Mihaly Csikszentmihalyi had discovered in his research that one of the simplest and most common forms of flow that people experience in their lives is reading a book – and, like other forms of flow, it is being choked off in our culture of constant distraction. I thought a lot about this.

Mihaly Csikszentmihalyi 在他的研究中发现，人们在生活中经历的最简单、最常见的心流形式之一就是读书，而与其他形式的心流一样，它在我们不断分心的文化中被抑制。我对此想了很多。

For many of us, reading a book is the deepest form of focus we experience – you dedicate many hours of your life, coolly, calmly, to

one topic, and allow it to marinate in your mind.

对于我们许多人来说，读书是我们经历的最深刻的专注形式——你将生命中的许多时间冷静地、平静地投入到一个主题上，并让它在你的脑海中沉淀。

This is the medium through which most of the deepest advances in human thought over the past 400 years have been figured out and explained. And that experience is now in freefall.

过去 400 年来，人类思想中大部分最深刻的进步都是通过这种媒介被弄清楚和解释的。而这种体验现在正处于自由落体状态。

In Provincetown I noticed I wasn't just reading more – I was reading differently. I was becoming much more deeply immersed in the books I had chosen.

在普罗温斯敦，我发现我不仅阅读更多，而且阅读方式有所不同。我越来越沉浸在我选择的书籍中。

I got lost in them for really long stretches, sometimes whole days – and I felt like I was understanding and remembering more of what I read.

我在其中迷失了很长一段时间，有时甚至一整天——我觉得我理解并记住了更多我读过的内容。

I seemed like I travelled further in that deckchair by the sea, reading book after book, than I had in the previous five years of shuttling frantically around the world: I went from fighting on the battlefields of the Napoleonic wars, to being an enslaved person in the Deep South, to being an Israeli mother trying to avoid hearing the news that her son has been killed.

我坐在海边的躺椅上，读了一本又一本的书，似乎比过去五年疯狂穿梭于世界各地走得更远：我从拿破仑战争的战场上战斗，变成了一个被奴役的人在南方腹地，一位以色列母亲试图避免听到儿子被杀的消息。

As I reflected on this, I started to think again about a book I had read ten years before: *The Shallows* by Nicholas Carr – a landmark work that really alerted people to a crucial aspect of the growing attention

crisis.

当我反思这一点时，我开始再次思考十年前读过的一本书：尼古拉斯·卡尔的《浅滩》——这是一本里程碑式的作品，它确实提醒人们注意日益严重的注意力危机的一个关键方面。

He warned that the way we are reading seems to be changing as we migrate to the internet – so I went back to one of the key experts he drew on, to see what she has learned since.

他警告说，随着我们转向互联网，我们的阅读方式似乎正在发生变化——所以我回到了他所聘请的一位重要专家，看看她从那以后学到了什么。

Anne Mangen is a professor of literacy at Stavanger University in Norway, and she explained to me that in two decades of researching this subject, she has proved something crucial.

安妮·曼根（Anne Mangen）是挪威斯塔万格大学的识字学教授，她向我解释说，在研究这个课题的二十年里，她证明了一些至关重要的东西。

Reading books trains us to read in a particular way – in a linear fashion, focused on one thing for a sustained period. Reading from screens, she has discovered, trains us to read in a different way – in a manic skip and jump from one thing to another.

读书训练我们以一种特定的方式阅读——以线性的方式，持续专注于一件事。她发现，通过屏幕阅读可以训练我们以不同的方式阅读——疯狂地从一件事跳到另一件事。

‘We’re more likely to scan and skim’ when we read on screens, her studies have found – we run our eyes rapidly over the information to extract what we need. But after a while, if we do this long enough, she told me that ‘this scanning and skimming bleeds over.

她的研究发现，当我们在屏幕上阅读时，“我们更有可能进行扫描和浏览”——我们会快速浏览信息以提取我们需要的内容。但过了一段时间，如果我们这样做的时间足够长，她告诉我，‘这种扫描和浏览就会消失。

It also starts to colour or influence how we read on paper ... That

behaviour also becomes our default, more or less.’ It was precisely what I had noticed when I tried to settle into Dickens when I arrived in Provincetown and found myself rushing ahead of him, as if it was a news article and I was trying to push for the key facts.

它也开始影响或影响我们在纸上的阅读方式……这种行为或多或少也成为我们的默认行为。”这正是我在到达普罗温斯敦并发现自己冲在狄更斯前面时所注意到的。他说，就好像这是一篇新闻文章，而我试图找出关键事实。

This creates a different relationship with reading. It stops being a form of pleasurable immersion in another world and becomes more like dashing around a busy supermarket to grab what you need and then get out again.

这与阅读建立了不同的关系。它不再是一种愉快地沉浸在另一个世界的形式，而变得更像是在繁忙的超市里冲来冲去，买你需要的东西，然后再出去。

When this flip takes place – when our screen-reading contaminates our book-reading – we lose some of the pleasures of reading books themselves, and they become less appealing.

当这种翻转发生时——当我们的屏幕阅读污染了我们的读书时——我们失去了读书本身的一些乐趣，而且它们变得不那么有吸引力。

It has other knock-on effects. Anne has conducted studies that split people into two groups, where one is given information in a printed book, and the other is given the same information on a screen. Everyone is then asked questions about what they just read.

它还有其他连锁反应。安妮进行了一项研究，将人们分为两组，一组在印刷书中获得信息，另一组在屏幕上获得相同的信息。然后每个人都会被问到有关他们刚刚读到的内容的问题。

When you do this, you find that people understand and remember less of what they absorb on screens. There’s broad scientific evidence for this now, emerging from fifty-four studies, and she explained that it’s referred to as ‘screen inferiority’. This gap in understanding between books and screens is big enough that in elementary-school children, it’s the equivalent of two-thirds of a year’s growth in reading comprehension.

当你这样做时，你会发现人们对屏幕上吸收的内容的理解和记忆较少。现在有来自 54 项研究的广泛科学证据证明了这一点，她解释说这被称为“屏幕自卑”。书籍和屏幕之间的理解差距足够大，对于小学生来说，这相当于一年阅读理解能力增长的三分之二。

As she spoke, I realised that the collapse in reading books is in some ways a symptom of our atrophying attention, and in some ways a cause of it.

当她说话时，我意识到读书的衰退在某种程度上是我们注意力萎缩的症状，在某种程度上也是其原因。

It's a spiral – as we began to move from books to screens, we started to lose some of the capacity for the deeper reading that comes from books, and that, in turn, made us less likely to read books. It's like when you gain weight, and it gets harder and harder to exercise.

这是一个螺旋式的循环——当我们开始从书籍转向屏幕时，我们开始失去一些来自书籍的更深层次阅读的能力，这反过来又使我们不太可能读书。就像当你体重增加时，运动就会变得越来越困难。

As a result, Anne told me she was worried we are now losing ‘our ability to read long texts any more’, and we are also losing our ‘cognitive patience ... [and] the stamina and the ability to deal with cognitively-challenging texts’.

因此，安妮告诉我，她担心我们现在正在失去“阅读长文本的能力”，而且我们也正在失去“认知耐心.....[以及]耐力和处理具有认知挑战性的文本的能力”。

When I was at Harvard conducting interviews, one professor told me that he struggled to get his students there to read even quite short books, and he increasingly offered them podcasts and YouTube clips they could watch instead. And that's Harvard. I started to wonder what happens to a world where this form of deep focus shrinks so far and so fast.

当我在哈佛进行采访时，一位教授告诉我，他很难让他的学生在那里阅读甚至很短的书，他越来越多地向他们提供播客和 YouTube 剪辑，让他们可以观看。那就是哈佛。我开始想知道，当这种深度聚焦形式缩小得如此之远、如此之快时，世界会发生什么。

What happens when that deepest layer of thinking becomes available to fewer and fewer people, until it is a small minority interest, like opera, or volleyball?

当越来越少的人能够进行最深层的思考，直到它成为少数人的兴趣，就像歌剧或排球一样时，会发生什么？



As I wandered the streets of Provincetown contemplating some of these questions, I found myself thinking back over a famous idea that I now realised I had never really understood before – one that was also mulled, in a different way, by Nicholas Carr in his book.

当我漫步在普罗温斯敦的街道上思考其中一些问题时，我发现自己想起了一个著名的想法，我现在意识到我以前从未真正理解过这个想法 - 尼古拉斯·卡尔在他的书中也以不同的方式思考了这个想法。

In the 1960s, the Canadian professor Marshall McLuhan talked a lot about how the arrival of television was transforming the way we see the world. He said these changes were so deep and so profound that it was hard to really see them. When he tried to distil this down into a phrase, he explained that ‘the medium is the message’.

20 世纪 60 年代，加拿大教授马歇尔·麦克卢汉 (Marshall McLuhan) 多次谈到电视的出现如何改变我们看待世界的方式。他说这些变化如此深刻、如此深刻，以至于很难真正看到它们。当他试图将其提炼成一个短语时，他解释说“媒介就是信息”。

What he meant, I think, was that when a new technology comes along, you think of it as like a pipe – somebody pours in information at one end, and you receive it unfiltered at the other. But it’s not like that. Every time a new medium comes along – whether it’s the invention of the printed book, or TV, or Twitter – and you start to use it, it’s like you are putting on a new kind of goggles, each with their own special colours and lenses. Each set of goggles you put on makes you see things differently.

我认为他的意思是，当一项新技术出现时，你会把它想象成一根管道——有人在一端倒入信息，你在另一端接收未经过滤的信息。但事实并非如此。每当一种新媒体出现时——无论是印刷书籍、电视还是推特的

发明——当你开始使用它时，就像戴上一种新型护目镜，每种护目镜都有自己特殊的颜色和镜片。您戴上的每副护目镜都会让您看到不同的事物。

So (for example) when you start to watch television, before you absorb the message of any particular TV show – whether it's *Wheel of Fortune* or *The Wire* – you start to see the world as being shaped like television itself. That's why McLuhan said that every time a new medium comes along – a new way for humans to communicate – it has buried in it a message. It is gently guiding us to see the world according to a new set of codes.

因此（例如）当你开始看电视时，在你吸收任何特定电视节目的信息之前——无论是《命运之轮》还是《火线》——你开始看到世界的形状就像电视本身一样。这就是为什么麦克卢汉说，每当一种新媒介——人类交流的新方式——出现时，它就埋藏了一条信息。它正在温柔地引导我们按照一套新的准则看世界。

The way information gets to you, McLuhan argued, is more important than the information itself. TV teaches you that the world is fast; that it's about surfaces and appearances; that everything in the world is happening all at once.

麦克卢汉认为，信息到达你的方式比信息本身更重要。电视告诉你世界很快；它与表面和外观有关；世界上的一切都是同时发生的。

This made me wonder what the message is that we absorb from social media, and how it compares to the message that we absorb from printed books. I thought first of Twitter. When you log in to that site – it doesn't matter whether you are Donald Trump or Bernie Sanders or Bubba the Love Sponge – you are absorbing a message through that medium and sending it out to your followers. What is that message? First: that you shouldn't focus on any one thing for long.

这让我想知道我们从社交媒体中吸收的信息是什么，以及它与我们从印刷书籍中吸收的信息相比如何。我首先想到的是推特。当您登录该网站时（无论您是唐纳德·特朗普、伯尼·桑德斯还是爱心海绵布巴），您都在通过该媒介吸收信息并将其发送给您的关注者。那条信息是什么？第一：你不应该长时间专注于任何一件事。

The world can and should be understood in short, simple statements

of 280 characters. Second: the world should be interpreted and confidently understood very quickly.

这个世界可以而且应该用 280 个字符的简短陈述来理解。第二：世界应该很快被解释和自信地理解。

Third: what matters most is whether people immediately agree with and applaud your short, simple, speedy statements. A successful statement is one that lots of people immediately applaud; an unsuccessful statement is one that people immediately ignore or condemn.

第三：最重要的是人们是否立即同意并为你简短、简单、快速的陈述鼓掌。一个成功的声明会立刻得到很多人的喝彩；一项不成功的声明会立即被人们忽视或谴责。

When you tweet, before you say anything else, you are saying that at some level you agree with these three premises. You are putting on those goggles and seeing the world through them.

当你发推文时，在你说任何其他话之前，你是在说你在某种程度上同意这三个前提。您戴上护目镜并通过它们看世界。

How about Facebook? What's the message in that medium? It seems to be first: your life exists to be displayed to other people, and you should be aiming every day to show your friends edited highlights of your life. Second: what matters is whether people immediately like these edited and carefully selective highlights that you spend your life crafting.

脸书怎么样？该媒体传达的信息是什么？这似乎是第一：你的生活的存在是为了向其他人展示，你应该每天向你的朋友展示你编辑过的生活亮点。第二：重要的是人们是否会立即喜欢你花费一生精心制作的这些经过编辑和精心挑选的亮点。

Third: somebody is your 'friend' if you regularly look at their edited highlight reels, and they look at yours – this is what friendship means.

第三：如果你经常查看他们编辑的精彩片段，而他们也看看你的精彩片段，那么某人就是你的“朋友”——这就是友谊的含义。

How about Instagram? First: what matters is *how* you look on the

outside. Second: what matters is how you look on the outside. Third: what matters is how you look on the outside. Fourth: what matters is whether people like how you look on the outside.

Instagram 怎么样？第一：重要的是你的外表。第二：重要的是你的外表。第三：重要的是你的外表。第四：重要的是人们是否喜欢你的外表。

(I don't mean this glibly or sarcastically: that really is the message the site offers.)

(我的意思并不是圆滑或讽刺：这确实是该网站提供的信息。)

I realised one of the key reasons why social media makes me feel so out of joint with the world, and with myself. I think all of these ideas – the messages implicit in these mediums – are wrong. Let's think about Twitter. In fact, the world is complex.

我意识到社交媒体让我感觉与世界、与自己格格不入的关键原因之一。我认为所有这些想法——这些媒介中隐含的信息——都是错误的。让我们想想推特。事实上，世界是复杂的。

To reflect that honestly, you usually need to focus on one thing for a significant amount of time, and you need space to speak at length. Very few things worth saying can be explained in 280 characters.

诚实地反映这一点，你通常需要花大量的时间专注于一件事，并且需要空间来详细地讲话。很少有值得说的事情可以用280个字符解释清楚。

If your response to an idea is immediate, unless you have built up years of expertise on the broader topic, it's most likely going to be shallow and uninteresting.

如果你对一个想法的反应是立即的，除非你在更广泛的主题上积累了多年的专业知识，否则它很可能会是肤浅且无趣的。

Whether people immediately agree with you is no marker of whether what you are saying is true or right – you have to think for yourself. Reality can only be understood sensibly by adopting the *opposite* messages to Twitter. The world is complex and requires steady focus

to be understood; it needs to be thought about and comprehended slowly; and most important truths will be unpopular when they are first articulated.

人们是否立即同意你并不能表明你说的是真是假——你必须自己思考。只有采用与推特相反的信息才能明智地理解现实。世界是复杂的，需要持续专注才能被理解；需要慢慢思考、慢慢领悟；最重要的真理在第一次被阐明时将不受欢迎。

I realised that the times in my own life when I've been most successful on Twitter – in terms of followers and retweets – are the times when I have been least useful as a human being: when I've been attention-deprived, simplistic, vituperative.

我意识到，在我自己的生活中，我在 Twitter 上最成功的时候（就关注者和转发而言）正是我作为一个人最没有用处的时候：当我被剥夺注意力、过于简单化时，谩骂。

Of course there are occasional nuggets of insight on the site – but if this becomes your dominant mode of absorbing information, I believe the quality of your thinking will rapidly degrade.

当然，网站上偶尔会有一些有价值的见解——但如果这成为你吸收信息的主要模式，我相信你的思维质量会迅速下降。

The same goes for Instagram. I like looking at pretty people, like everyone else. But to think that life is primarily about these surfaces – getting approval for your six-pack or how you look in a bikini – is a recipe for unhappiness. And the same goes for a lot of how we interact on Facebook too. It's not a friendship to pore jealously over another person's photos and boasts and complaints, and to expect them to do the same for you. In fact, that's pretty much the opposite of friendship.

Instagram 也是如此。我和其他人一样，喜欢看漂亮的人。但如果你认为生活主要取决于这些表面——你的六块腹肌得到认可或者你穿比基尼的样子——就会导致不快乐。我们在 Facebook 上的很多互动方式也是如此。嫉妒地盯着别人的照片、吹嘘和抱怨，并期望他们为你做同样的事情，这不是友谊。事实上，这与友谊恰恰相反。

Being friends is about looking into each other's eyes, doing things together in the world, an endless exchange of gut laughs and bear

hugs, joy and grief and dancing.

成为朋友就是看着对方的眼睛，在世界上一起做事，无休止地交换发自内心的笑声和拥抱，欢乐和悲伤以及舞蹈。

These are all the things Facebook will often drain from you by dominating your time with hollow parodies of friendship.

Facebook 常常会用空洞的友谊来占据你的时间，从而从你身上榨干这些东西。

After thinking all this, I would return to the printed books I was piling up against the wall of my beachhouse. What, I wondered, is the message buried in the medium of the printed book?

想完这一切后，我会回到海边别墅墙上堆放的印刷书籍上。我想知道，印刷书籍的媒介中隐藏着什么信息？

Before the words convey their specific meaning, the medium of the book tells us several things. Firstly, life is complex, and if you want to understand it, you have to set aside a fair bit of time to think deeply about it. You need to slow down.

在文字传达其具体含义之前，这本书的媒介告诉了我们几件事。首先，生活是复杂的，如果你想理解它，你必须留出相当多的时间来深入思考它。你需要放慢速度。

Secondly, there is a value in leaving behind your other concerns and narrowing down your attention to one thing, sentence after sentence, page after page. Thirdly, it is worth thinking deeply about how other people live and how their minds work.

其次，抛开其他顾虑，将注意力集中在一件事情上，一句接着一句，一页接着一页，是有价值的。第三，值得深入思考其他人如何生活以及他们的思想如何运作。

They have complex inner lives just like you.

他们和你一样有复杂的内心生活。

I realised that I agree with the messages in the medium of the book. I think they are true. I think they encourage the best parts of human

nature – that a life with lots of episodes of deep focus is a good life. It is why reading books nourishes me.

我意识到我同意书中传达的信息。我认为他们是真的。我认为它们鼓励了人性中最好的部分——充满深度专注的生活才是美好的生活。这就是为什么读书可以滋养我。

And I don't agree with the messages in the medium of social media. I think they primarily feed the uglier and shallower parts of my nature.

我不同意社交媒体上的信息。我认为它们主要满足了我本性中丑陋和浅薄的部分。

It is why spending time on these sites – even when, by the rules of the game, I am doing well, gaining likes and followers – leaves me feeling drained and unhappy. I like the person I become when I read a lot of books.

这就是为什么花时间在网站上——即使根据游戏规则，我做得很好，获得了喜欢和关注者——让我感到疲惫和不快乐。我喜欢读了很多书后成为的人。

I dislike the person I become when I spend a lot of time on social media.

我不喜欢当我花大量时间在社交媒体上时我变成的人。



But I wondered if I was getting carried away – these were just my hunches, after all – so later, I went to the University of Toronto to interview Raymond Mar, who is a professor of psychology there. Raymond is one of the social scientists who has done most in the world to study the effects that reading books has on our consciousness, and his research has helped to open up a distinctive way of thinking about this question.

但我想我是否得意忘形了——毕竟这只是我的预感——所以后来，我去了多伦多大学采访雷蒙德·马尔，他是那里的心理学教授。雷蒙德是世界上在研究读书对我们意识的影响方面所做最多努力的社会科学家之一，他的研究有助于开辟一种思考这个问题的独特方式。

When he was a little boy, Raymond read obsessively – but it had never occurred to him to try to figure out how reading itself might affect the way in which our minds work until he was a grad student, and one day, his mentor, Professor Keith Oatley, put a thought to him. When you read a novel, you are immersing yourself in what it's like to be inside another person's head. You are simulating a social situation. You are imagining other people and their experiences in a deep and complex way.

当他还是个小男孩时，雷蒙德就沉迷于阅读，但他从未想过要尝试弄清楚阅读本身如何影响我们的思维方式，直到他成为一名研究生，有一天，他的导师教授基思·奥特利，想想他。当你读一本小说时，你正在沉浸在另一个人的头脑中。您正在模拟社交情境。你正在以深刻而复杂的方式想象其他人和他们的经历。

So maybe, he said, if you read a lot of novels, you will become better at actually understanding other people off the page. Perhaps fiction is a kind of empathy gym, boosting your ability to empathise with other people – which is one of the most rich and precious forms of focus we have. Together, they decided to begin to study this question scientifically.

所以，他说，如果你读了很多小说，你可能会更善于真正理解书外的其他人。也许小说是一种同理心健身房，可以提高你同情他人的能力——这是我们拥有的最丰富、最宝贵的专注形式之一。他们一起决定开始科学地研究这个问题。

It's a tricky thing to study. Some other scientists had developed a technique where you give somebody a passage to read, and then immediately afterwards you test their empathy. But to Raymond, this was flawed.

研究起来是一件很棘手的事情。其他一些科学家开发了一种技术，让某人阅读一段文章，然后立即测试他们的同理心。但对雷蒙德来说，这是有缺陷的。

If reading affects us, it reshapes us over the longer term – it's not like coming up on ecstasy, where you swallow it and experience immediate effects for a few hours.

如果阅读对我们产生影响，从长远来看，它会重塑我们——这不像服用摇头丸，吞下它并在几个小时内体验到立竿见影的效果。

With his colleagues he came up with a clever three-stage experiment, designed to see if this longer-term effect existed. If you took part in the test, you were brought into a lab and you were shown a list of names.

他与同事们想出了一个巧妙的三阶段实验，旨在看看这种长期效应是否存在。如果您参加了测试，您就会被带入实验室，并向您展示一份姓名列表。

Some were famous novelists; some were famous non-fiction writers; and some were random people who aren't writers at all. You were asked to circle the names of the novelists, and then, separately, you were asked to circle the names of the non-fiction writers.

有些是著名的小说家；有些是著名的小说家。有些是著名的非小说类作家；有些是随机的人，根本不是作家。你被要求圈出小说家的名字，然后，你被要求圈出非小说类作家的名字。

Raymond reasoned that people who had read more novels over their lifetime would be able to recognise the names of more fiction writers. He also now had an interesting comparison group – people who had read a lot of non-fiction books.

雷蒙德推断，一生中读过更多小说的人能够认出更多小说作家的名字。他现在还有一个有趣的对照组——读过很多非小说类书籍的人。

Then he gave everyone two tests. The first used a technique that's sometimes used to diagnose autism. You are shown lots of pictures of people's eye areas, and you are asked: what is this person thinking? It's a way of measuring how good you are at reading the subtle signals that reveal the emotional state of another person.

然后他给每个人做了两次测试。第一个使用了有时用于诊断自闭症的技术。你会看到很多人们眼睛区域的图片，然后被问到：这个人在想什么？这是一种衡量你是否善于解读揭示他人情绪状态的微妙信号的方法。

In the second test, you sat down and watched several videos of real people in real situations like, for example, two men who had just played a squash game talking to each other. You had to figure out:

what's going on here? Who won the game? What's the relationship between them?

在第二个测试中，你坐下来观看几个真实场景中真人的视频，例如，两个刚刚打壁球的男人互相交谈。你必须弄清楚：这里发生了什么？谁赢得了比赛？他们之间是什么关系？

How do they feel? Raymond and the experimenters knew the real answer – and so they could see who, in the test, was best at reading the social signals and figuring it out.

他们感觉怎么样？雷蒙德和实验者知道真正的答案，因此他们可以在测试中看出谁最擅长解读社交信号并找出答案。

When they got the results, they were clear. The more novels you read, the better you were at reading other people's emotions. It was a huge effect.

当他们得到结果的时候，他们就很清楚了。你读的小说越多，你就越善于解读别人的情感。这是一个巨大的影响。

This wasn't just a sign that you were better educated – because, reading non-fiction books, by contrast, had no effect on your empathy.

这不仅仅是你受过更好教育的标志——因为相比之下，阅读非小说类书籍对你的同理心没有影响。

I asked Raymond – why?

我问雷蒙德——为什么？

Reading, he told me, creates a 'unique form of consciousness ... While we're reading, we're directing attention outwards towards the word on the page and, at the same time, enormous amounts of attention is going inwards as we imagine and mentally simulate.' It's different from if you just close your eyes and try to imagine something off the top of your head.

他告诉我，阅读创造了一种“独特的意识形式……当我们阅读时，我们将注意力向外转移到页面上的单词上，同时，大量的注意力正在向内转移，正如我们想象的那样，精神上模拟。”这与闭上眼睛并尝试从头顶想象一些东西不同。

‘It’s being structured – but our attention is in a very unique place, fluctuating both out towards the page, towards the words, and then inwards, towards what those words represent.’ It’s a way of combining ‘outwardly directed attention and inwardly directed attention’.

“它是结构化的——但我们的注意力处于一个非常独特的位置，既向外波动到页面，转向单词，然后又向内波动，转向这些单词所代表的内容。”这是一种结合“外向注意力和内向注意力”的方式’。

When you read fiction in particular, you imagine what it is like to be another person.

特别是当你读小说时，你会想象成为另一个人是什么样子。

You find yourself, he says, ‘trying to understand the different characters, their motivations, their goals, tracking those different things. It’s a form of practice.

他说，你发现自己“试图理解不同的角色、他们的动机、他们的目标，追踪这些不同的事情。”这是一种练习形式。

We’re probably using the same kinds of cognitive processes that we would use to understand our real peers in the real world.’ You simulate being another human being so well that fiction is a far better virtual-reality simulator than the machines currently marketed under that name.

我们可能使用与我们在现实世界中理解真实同伴相同的认知过程。”你可以很好地模拟另一个人，以至于小说是比目前销售的机器更好的虚拟现实模拟器。那个名字。

Each of us can only ever experience a small sliver of what it’s like to be a human being alive today, Raymond told me, but as you read fiction, you see inside other people’s experiences. That doesn’t vanish when you put down the novel.

雷蒙德告诉我，我们每个人只能体验到今天作为一个人的一小部分，但当你读小说时，你会看到别人的经历。当你放下小说时，这种感觉并不会消失。

When you later meet a person in the real world, you'll be better able to imagine what it's like to be them. Reading a factual account may make you more knowledgeable, but it doesn't have this empathy-expanding effect.

当您以后在现实世界中遇到一个人时，您将能够更好地想象成为他们是什么样的。阅读事实性的叙述可能会让你知识更丰富，但它没有这种扩大同理心的效果。

There have now been dozens of other studies replicating the core effect that Raymond discovered. I asked Raymond what would happen if we discovered a drug that boosted empathy as much as reading fiction has been shown to in his work.

现在已有数十项其他研究复制了雷蒙德发现的核心效应。我问雷蒙德，如果我们发现一种可以像阅读小说那样增强同理心的药物，会发生什么。

'If it had no side effects,' he said, 'I think that it would be a very popular drug.' The more I talked with him, the more I reflected that empathy is one of the most complex forms of attention we have – and the most precious.

“如果它没有副作用，”他说，“我认为它会是一种非常受欢迎的药物。”我和他交谈得越多，我就越意识到同理心是我们所拥有的最复杂的注意力形式之一——并且最珍贵。

Many of the most important advances in human history have been advances in empathy – the realisation by at least some white people that other ethnic groups have feelings and abilities and dreams just like them; the realisation by some men that the way they have exerted power over women was illegitimate and caused real suffering; the realisation by many heterosexuals that gay love is just like straight love.

人类历史上许多最重要的进步都是同理心的进步——至少一些白人意识到其他种族群体也和他们一样有感情、能力和梦想；一些男性意识到他们对女性施加权力的方式是非法的，并且造成了真正的痛苦；许多同性恋者意识到同性爱情就像异性恋一样。

Empathy makes progress possible, and every time you widen human empathy, you open the universe a little more.

同理心使进步成为可能，每当你扩大人类同理心时，你就向宇宙开放了一点。

But – as Raymond is the first to point out – these results can be interpreted in a very different way. It could be that reading fiction, over time, boosts your empathy. But it could also be that people who are already empathetic are simply more drawn to reading novels.

但是，正如雷蒙德第一个指出的那样，这些结果可以用一种非常不同的方式来解释。随着时间的推移，阅读小说可能会增强你的同理心。但也可能是那些已经具有同理心的人更喜欢阅读小说。

This makes his research controversial, and contested. He told me that it's likely that both are true – that reading fiction boosts your empathy, and that empathetic people are more drawn to reading fiction.

这使得他的研究备受争议。他告诉我，这两种说法很可能都是正确的——阅读小说可以增强你的同理心，而有同理心的人更容易被小说所吸引。

But there's a hint, he said, that reading fiction really does have a significant effect: one of his studies found that the more a child is read storybooks – something their parents, more than the kid, choose – the better they are at reading other people's emotions.

但他说，有一个暗示，阅读小说确实有显著的效果：他的一项研究发现，孩子读故事书的次数越多（他们的父母比孩子更多地选择故事书），他们就越擅长阅读其他故事书。人们的情绪。

This suggests that the experience of stories really does expand their empathy.

这表明故事的经历确实扩大了他们的同理心。

If we have reasons to believe that reading fiction boosts our empathy, do we know what the forms that are largely replacing it – like social media – are doing to us?

如果我们有什么理由相信阅读小说可以增强我们的同理心，那么我们是否知道很大程度上取代它的形式（例如社交媒体）对我们做了什么？

Raymond said it's easy to be snobbish about social media and to fall into a moral panic, and he finds that way of thinking silly. There's a lot that is good about social media, he stressed.

雷蒙德说，人们很容易对社交媒体表现出势利并陷入道德恐慌，他发现这种思维方式很愚蠢。他强调说，社交媒体有很多好处。

The effects he is describing aren't to do primarily with the printed page, he said – they are to do with being immersed in a complex narrative that simulates the social world. His studies have found that long TV series are just as effective, he said. But there's a catch.

他说，他所描述的效果主要与印刷页面无关，而是与沉浸在模拟社交世界的复杂叙述中有关。他说，他的研究发现长电视剧同样有效。但有一个问题。

One of his studies showed that children are more empathetic if they read storybooks or watch movies, but not if they watch shorter shows.

他的一项研究表明，如果孩子们读故事书或看电影，他们会更有同理心，但如果他们看较短的节目，他们的同理心就不会那么强。

This seems to fit, it seemed to me, with what we see on social media – if you see the world through fragments, your empathy often doesn't kick in, in the way that it does when you engage with something in a sustained, focused way.

在我看来，这似乎与我们在社交媒体上看到的情况相符——如果你通过碎片来看待世界，你的同理心通常不会发挥作用，就像你持续参与某件事时那样，集中方式。

As I talked with him, I thought: We internalise the texture of the voices we're exposed to. When you expose yourself to complex stories about the inner lives of other people over long periods of time, that will repattern your consciousness.

当我与他交谈时，我想：我们将所接触到的声音的质感内化。当你长时间接触有关他人内心生活的复杂故事时，你的意识就会被重新塑造。

You too will become more perceptive, open and empathetic. If, by contrast, you expose yourself for hours a day to the disconnected fragments of shrieking and fury that dominate social media, your thoughts will start to be shaped like that.

你也会变得更有洞察力、更开放、更有同理心。相比之下，如果你每天让自己几个小时暴露在社交媒体上充斥着尖叫和愤怒的碎片中，你的想法就会开始像这样形成。

Your internal voices will become cruder, louder, less able to hear more tender and gentle thoughts. Take care what technologies you use, because your consciousness will, over time, come to be shaped like those technologies.

你内心的声音会变得更粗鲁、更大声，更无法听到更温柔的想法。注意你使用的技术，因为随着时间的推移，你的意识会变得像那些技术一样。

Before I said goodbye to Raymond, I asked him why he had spent so much time studying the effects of reading fiction on human consciousness. Up to the moment when I asked this, he had been something of a data geek, explaining his methods in great detail.

在与雷蒙德告别之前，我问他为什么花这么多时间研究阅读小说对人类意识的影响。直到我问这个问题时，他一直是一个数据极客，非常详细地解释了他的方法。

But as he answered, his face opened up. ‘We’re all on the same ball of mud and water that is heading towards a catastrophic end potentially. If we are going to solve these problems, we can’t do it alone,’ he said. ‘That’s why I think empathy is so valuable.’

但当他回答的时候，他的脸就张开了。“我们都处于同一团泥水之中，有可能走向灾难性的结局。如果我们要解决这些问题，我们无法独自完成，”他说。“这就是为什么我认为同理心如此有价值。”

Cause Five: The Disruption of Mind-Wandering

5

5 原因五：走神的干扰

For more than one hundred years, there has been one image – a metaphor – that has, above all others, dominated how experts think about attention.

一百多年来，有一种形象——一种隐喻——最重要的是主导了专家们对注意力的看法。

Picture the Hollywood Bowl, crammed with tens of thousands of people, with all the laughing and jostling and yelling that takes place as people saunter in and wait for the show. Then, suddenly, the lights go down, and on the stage, a spotlight appears.

想象一下好莱坞露天剧场挤满了成千上万的人，当人们漫步进去等待演出时，充满了欢笑、推挤和叫喊。然后，突然，灯光暗了下来，舞台上出现了聚光灯。

It lights up one individual: Beyoncé. Or Britney. Or Bieber. Suddenly all the chatter and clatter cease, and the focus of that room narrows to one person and their awesome power. In 1890 the founder of modern American psychology, William James, wrote – in the most influential text ever (in the Western world, at least) on this subject – that

‘everyone knows what attention is’. Attention, he said, is a spotlight.

它照亮了一个人：碧昂斯。或者布兰妮。或者比伯。突然间，所有的喋喋不休都停止了，房间的焦点集中在一个人和他们令人敬畏的力量上。1890 年，现代美国心理学的创始人威廉·詹姆斯 (William James) 在关于这个主题的有史以来（至少在西方世界）最具影响力的文本中写道，“每个人都知道注意力是什么”。他说，注意力是聚光灯。

To put it in our terms, it's the moment Beyoncé appears, alone, on the stage, and everyone else around you seems to vanish.

用我们的话来说，就是碧昂丝独自出现在舞台上的那一刻，而你周围的其他人似乎都消失了。

James himself offered other images at the time too, and psychologists have tried other ways of thinking about it – but ever since, the study of attention has primarily been the study of the spotlight.

詹姆斯本人当时也提供了其他图像，心理学家也尝试过其他思考方式——但从那时起，对注意力的研究主要是对聚光灯的研究。

This image, I realised when I stopped to think about it, dominated how I thought about attention too. Attention is usually defined as a person's ability to selectively attend to something in the environment.

当我停下来思考时，我意识到这个形象也主导了我对注意力的看法。注意力通常被定义为一个人选择性地关注环境中某些事物的能力。

So when I said I was distracted, I meant that I couldn't narrow the spotlight of my attention down to the one thing I want to focus on. I want to read a book, but the light of my attention won't fade from my phone, or from the people talking in the street outside, or from my anxieties about work. There's a lot of truth in this way of thinking about attention – but I learned that, in fact, this is only one form of attention that you need in order to function fully.

因此，当我说我分心时，我的意思是我无法将注意力集中在我想要关注的一件事上。我想读书，但我的注意力不会从我的手机上消失，也不会从外面街上的人们谈话中消失，也不会从我对工作的焦虑中消失。这种关于注意力的思考方式有很多道理——但我了解到，事实上，这只是你充分发挥功能所需的一种注意力形式。

It exists alongside other forms of attention that are just as essential for you to be able to think coherently – and those forms are under even greater threat right now than your spotlight.

它与其他形式的注意力并存，这些形式对于你能够连贯地思考同样重要——而这些形式现在比你的聚光灯面临着更大的威胁。



In my life before I fled to Cape Cod, I lived in a tornado of mental stimulation. I would never go for a walk without listening to a podcast or talking on the phone. I would never wait two minutes in a store without looking at my phone or reading a book.

在逃到科德角之前，我生活在精神刺激的龙卷风中。如果不听播客或打电话，我永远不会去散步。我绝不会在商店等两分钟而不看手机或看书。

The idea of not filling every minute with stimulation panicked me, and I found it weird when I saw other people not doing it.

不让每一分钟都充满刺激的想法让我感到恐慌，当我看到其他人不这样做时，我觉得很奇怪。

On long train or bus journeys, whenever I would see somebody just sit there for six hours, doing nothing but stare out of the window, I would feel an urge to lean over to them and say, ‘I’m sorry to disturb you.

在长途火车或公共汽车旅途中，每当我看到有人只是坐在那里六个小时，什么也不做，只是盯着窗外，我就会有一种冲动，想靠向他们说：“很抱歉打扰你。”

It’s none of my business, but I just wanted to check – you do realise that you have a limited amount of time in which to be alive, and the clock counting down towards death is constantly ticking, and you’ll *never* get back these six hours you are spending doing nothing at all? And when you are dead, you’ll be dead *forever*? You know that, right?’ (I never did this, as you can tell from the fact I am not writing this book from a psychiatric institution, but it crossed my mind.)

这不关我的事，但我只是想检查一下——你确实意识到你的生存时间是有限的，而死亡倒计时的时钟在不断滴答作响，你永远不会回到这六个你有几个小时什么都不做？当你死了，你就永远死了？你知道这一点，对吧？”（我从来没有这样做过，你可以从我不是在精神病院写这本书的事实中看出，但我确实有过这样的想法。）

So I thought that in Provincetown, stripped of distractions, I would gain one benefit – I would be able to be even more stimulated, for even longer periods, and retain even more of what I inhaled. I can listen to longer podcasts! I can read longer books!

所以我想，在普罗温斯敦，没有干扰，我会得到一个好处——我会受到更多的刺激，持续更长时间，并保留更多我吸入的东西。我可以听更长的播客！我可以读更长的书！

That did happen – but it occurred alongside something else, something I didn't see coming. One day I left my iPod at home, and I decided to simply go for a walk along the beach. I walked for two hours, and I let my thoughts float, without my spotlight settling on anything.

那确实发生了——但它与其他事情一起发生，一些我没有预见到的事情发生。有一天，我把 iPod 落在家里了，我决定简单地沿着海滩散步。我走了两个小时，让我的思绪飘浮，没有聚光灯落在任何东西上。

I felt my mind roam – from looking at the little crabs on the beach, to memories of my childhood, to ideas for books I might write years from now, to the shapes of the men sunning themselves in Speedos. My consciousness drifted like the boats I could see bobbing on the horizon.

我感觉自己的思绪在漫游——从海滩上的小螃蟹，到童年的回忆，到几年后我可能写的书的想法，再到穿着泳裤晒太阳的男人的形状。我的意识就像我看到的在地平线上漂浮的小船一样漂移。

At first I felt guilty. You came here to focus, I said to myself, and to learn about focus. But what you are indulging in is its opposite – a mental detumescence. But I continued.

起初我感到内疚。我对自己说，你来到这里是为了集中注意力，也是为了学习如何集中注意力。但你所沉迷的恰恰相反——精神消肿。但我继续说。

Before long, I was doing this every day, and my periods of meandering started to stretch to three, four, sometimes even five hours. This would have been unthinkable to me in my normal life. But in that time, I felt more creative than I had since I was a child.

不久之后，我每天都这样做，我的徘徊时间开始延长到三个、四个，有时甚至五个小时。这对于我的正常生活来说是不可想象的。但在那段时间，我感觉自己比小时候更有创造力了。

Ideas started spinning out of my head. When I would get home and write them down, I realised I was having more creative ideas – and making more connections – in a single three-hour walk than I usually had in a month. I started to let smaller moments of mind-wandering in too. When I finished reading a book, I would just lie there for twenty minutes, thinking about it, staring out to sea.

各种想法开始从我的脑海中浮现出来。当我回家并把它们写下来时，我意识到我在三个小时的步行中产生了更多的创意，并建立了更多的联系，这比我通常一个月的时间要多。我也开始允许一些较小的走神时刻。当我读完一本书时，我会躺在那里二十分钟，凝视着大海，思考它。

Weirdly, it seemed like letting my spotlight disappear entirely was improving my ability to think and to focus in some way I couldn't articulate. How could that be?

奇怪的是，让我的聚光灯完全消失似乎提高了我的思考能力和以某种我无法表达的方式集中注意力的能力。怎么可能呢？

I only began to understand what was happening when I learned that over the past thirty years, there has been a sudden bubbling up of research into this very topic: mind-wandering.

当我了解到在过去的三十年里，关于“走神”这一主题的研究突然兴起时，我才开始明白发生了什么。



In the 1950s, in the small town of Aberdeen in Washington state, a high-school chemistry teacher named Mr Smith had a problem with one of his students, a teenage boy named Marcus Raichle. He called in

the boy's parents and explained sternly that he was doing something bad. 'Your son has a habit of daydreaming,' he said. We all know this is one of the worst things you can do at school.

20 世纪 50 年代，在华盛顿州的阿伯丁小镇，一位名叫史密斯先生的高中化学老师与他的一个学生，一个名叫马库斯·雷克尔的十几岁男孩发生了争执。他叫来了男孩的父母，严厉地解释说他做了坏事。“你儿子有做白日梦的习惯，”他说。我们都知道这是你在学校能做的最糟糕的事情之一。

Thirty years later, their son helped to make a breakthrough on this very topic – one that Mr Smith would not have approved of. Marcus became a prominent neuroscientist and won the Kavli Prize, a leading honour in the field.

三十年后，他们的儿子帮助在这个话题上取得了突破——这是史密斯先生不会批准的。马库斯成为一位杰出的神经科学家，并获得了该领域的领先荣誉卡维利奖。

In the 1980s, a whole new way of seeing what was happening in people's brains – the PET (positron emission tomography) scan – evolved right outside his office, where the technology was being applied for the first time, by him and his colleagues. I stood on that very spot, in the Washington School of Medicine in St Louis, Missouri, when I went to interview him.

20 世纪 80 年代，一种全新的方式来观察人们大脑中发生的情况——PET（正电子发射断层扫描）扫描——就在他的办公室外出现，他和他的同事在这里首次应用了这项技术。当我去采访他时，我就站在密苏里州圣路易斯华盛顿医学院的那个地方。

He was one of the first scientists who was able to use this new tool, and when he switched it on with a patient inside, he was able to see into a living human brain in a way almost nobody ever had before.

他是最早能够使用这种新工具的科学家之一，当他在病人体内打开它时，他能够以一种几乎从未有过的方式看到活人的大脑。

Back in his medical training, Marcus had been confidently told that we know what's happening inside your head in the moments when you are not focusing. Your brain is 'lying there dormant, quiet, doing nothing, like muscles do until you start to move them', he was told.

早在接受医学培训时，马库斯就被自信地告知，当你注意力不集中时，我们知道你的大脑中正在发生什么。他被告知，你的大脑“处于休眠状态，安静，什么都不做，就像肌肉一样，直到你开始移动它们”。

But one day Marcus noticed something odd. He had some patients strapped in for a PET scan, and those patients were waiting for him to give them a task and just letting their minds wander. As he got the task ready, he glanced at the machine, and he was puzzled.

但有一天，马库斯注意到了一些奇怪的事情。他让一些病人系好安全带进行 PET 扫描，这些病人等着他给他们布置任务，然后让他们的思绪飘散。当他准备好任务的时候，他看了一眼机器，心中感到疑惑。

Their brains, it seemed, were not inactive, as his med-school tutors had said they should be. Activity had shifted from one part of the brain to another – but the brain was still highly active. Surprised, he began to study this in detail.

他们的大脑似乎并不像他的医学院导师所说的那样不活跃。活动已经从大脑的一个部分转移到另一部分——但大脑仍然高度活跃。他心中一惊，开始仔细研究起来。

He named the region of the brain that becomes more active when you think you're not doing much 'the default mode network' – and as he studied this more, analysing what people's brains do when they seem to be doing nothing, he could physically see this region light up on the brain scans.

他将当你认为自己没有做太多事情时大脑中变得更加活跃的区域命名为“默认模式网络”——当他对此进行了更多研究，分析人们的大脑在他们似乎无所事事时会做什么时，他可以在物理上在大脑扫描中看到这个区域亮起来。

As he looked at them, Marcus said, 'God, there she was. The whole thing. It was just stunning.'

马库斯看着他们，说道：“天哪，她就在那儿。”整个东西。这真是令人惊叹。

It was a paradigm shift in what scientists thought happens inside our brains, and it triggered an explosion of scientific research into

dozens of topics all over the world.

这是科学家认为我们大脑内部发生的事情的范式转变，并引发了全世界对数十个主题的科学研究的爆炸式增长。

One of them was a sudden surge of interest in the science of mind-wandering, asking: what happens when our thoughts float freely, without any immediate focus to anchor them? We can see something is happening – but what?

其中之一是对走神科学的兴趣突然激增，并提出疑问：当我们的思想自由漂浮而没有任何直接的焦点来锚定它们时，会发生什么？我们可以看到正在发生一些事情——但是是什么？

As the debate developed over decades, some scientists came to think that the default mode network is the part of the brain that becomes most active during mind-wandering, and others strongly disagreed – it's an ongoing debate.

随着争论持续了数十年，一些科学家开始认为默认模式网络是大脑中在走神期间变得最活跃的部分，而其他人则强烈反对——这是一个持续的争论。

But Marcus's findings led to a rush of scientific research into why our minds wander at all, and what benefits it might produce.

但马库斯的发现引发了一系列科学研究，探讨我们的思维为何会走神，以及它可能带来什么好处。

To understand this better, I went to Montreal in Quebec to interview Nathan Spreng, who is a professor of neurology and neurosurgery at McGill University, and to York in England to interview Jonathan Smallwood, who is a professor of psychology at the university there. They are two of the people who have studied this question in most depth.

为了更好地理解这一点，我前往魁北克省蒙特利尔采访了麦吉尔大学神经病学和神经外科教授内森·斯普伦（Nathan Spreng），并前往英国约克采访了该大学心理学教授乔纳森·斯莫尔伍德（Jonathan Smallwood）。他们是对这个问题研究得最深入的两个人。

It is a relatively new field of science, so some of its basic ideas are still quite contested, and more will become clear in the coming decades.

这是一个相对较新的科学领域，因此它的一些基本观点仍然颇有争议，但更多的观点将在未来几十年内变得清晰。

But in their dozens of scientific studies, they had discovered – it seemed to me – three crucial things that are happening during mind-wandering.

但在他们的数十项科学研究中，他们发现了——在我看来——走神过程中发生的三件至关重要的事情。

Firstly, you are slowly making sense of the world. Jonathan gave me an example. When you read a book – as you are doing now – you obviously focus on the individual words and sentences, but there's always a little bit of your mind that is wandering.

首先，你正在慢慢理解这个世界。乔纳森给了我一个例子。当你读一本书时——就像你现在所做的那样——你显然会专注于单个单词和句子，但你的思绪总会有一点走神。

You are thinking about how these words relate to your own life. You are thinking about how these sentences relate to what I said in previous chapters. You are thinking about what I might say next.

你正在思考这些词与你自己的生活有何关系。你正在思考这些句子与我在前几章中所说的内容有何关系。你正在思考我接下来会说什么。

You are wondering if what I am saying is full of contradictions, or whether it will all come together in the end. Suddenly you picture a memory from your childhood, or from what you saw on TV last week.

你想知道我说的话是否充满矛盾，或者最终是否会走到一起。突然，你脑海中浮现出童年的记忆，或者上周在电视上看到的情景。

'You draw together the different parts of the book in order to make sense of the key theme,' he said. This isn't a flaw in your reading. This is reading. If you weren't letting your mind wander a little bit right now, you wouldn't really be reading this book in a way that would

make sense to you. Having enough mental space to roam is essential for you to be able to understand a book.

“你将本书的不同部分放在一起，以便理解关键主题，”他说。这不是你阅读中的缺陷。这就是读书。如果你现在不让自己的思绪稍微走神一下，你就不会真正以一种对你来说有意义的方式阅读这本书。拥有足够的心理空间对于你能够理解一本书至关重要。

This isn't just true of reading. It is true of life. Some mind-wandering is essential for things to make sense.

这不仅仅适用于阅读。生活就是如此。一些走神对于让事情变得有意义至关重要。

‘If you couldn't do it,’ Jonathan told me, ‘so many other things would go out of the window.’ He has found that the more you let your mind wander, the better you are at having organised personal goals, being creative, and making patient, long-term decisions.

“如果你做不到这一点，”乔纳森告诉我，“那么很多其他的事情都会被抛到九霄云外。”他发现，你越让自己的思绪游离，你就越能更好地组织个人目标，富有创造力，并做出耐心的长期决策。

You will be able to do these things better if you let your mind drift, and slowly, unconsciously, make sense of your life.

如果你让自己的思绪随波逐流，慢慢地、无意识地理解你的生活，你就能把这些事情做得更好。

Secondly, when your mind wanders, it starts to make new connections between things – which often produces a solution to your problems. As Nathan put it to me, ‘I think what's happening is that, when there's unresolved issues, the brain tries to make things fit,’ if it's just given the space to do it.

其次，当你的思维走神时，它会开始在事物之间建立新的联系——这通常会为你的问题提供解决方案。正如内森对我所说，“我认为正在发生的事情是，当有未解决的问题时，大脑会试图让事情变得合适”，如果它有足够的空间去做的话。

He gave me a famous example: the nineteenth-century French

mathematician Henri Poincaré was wrestling with one of the hardest problems in maths, and he had narrowed his spotlight down onto every squiggle of it for ages, and he was getting nowhere.

他给我举了一个著名的例子：十九世纪的法国数学家亨利·庞加莱（Henri Poincaré）正在努力解决数学中最难的问题之一，多年来他一直将注意力集中在其中的每一个曲线上，但他一无所获。

Then one day when he was away on a trip, suddenly, as he was stepping into a bus, the solution came to him in a flash. It was only when he turned off the spotlight of his focus, and let his mind wander on its own, that he could connect the pieces, and finally answer the problem.

有一天，当他外出旅行时，当他踏上一辆公共汽车时，突然间，他想到了解决方案。只有当他关掉焦点的聚光灯，让自己的思绪自行游走时，他才能将这些碎片串联起来，最终回答问题。

In fact, when you look back over the history of science and engineering, many great breakthroughs don't happen during periods of focus – they happen during mind-wandering.

事实上，当你回顾科学和工程的历史时，你会发现许多伟大的突破并不是在专注期间发生的，而是在走神期间发生的。

‘Creativity is not [where you create] some new thing that's emerged from your brain,’ Nathan told me.

“创造力并不是从你的大脑中产生的一些新事物，”内森告诉我。

‘It's a new association between two things that were already there.’ Mind-wandering allows ‘more extended trains of thought to unfold, which allows for more associations to be made.’ Henri Poincaré couldn't have come up with his solution if he had remained narrowly focused on the math problem he was trying to solve, or if he had been totally distracted.

“这是两个已经存在的事物之间的新关联。”走神可以“展开更广泛的思维序列，从而可以建立更多的关联。”如果亨利·庞加莱（Henri Poincaré）无法想出他的解决方案，仍然专注于他试图解决的数学问题，或者他是否完全分心了。

It took mind-wandering to get him there.

他需要走神才能到达那里。

Thirdly, during mind-wandering, your mind will – Nathan said – engage in ‘mental time-travel’, where it roams over the past and tries to predict the future.

第三，内森说，在走神期间，你的大脑会进行“精神时间旅行”，漫游过去并试图预测未来。

Freed from the pressures of thinking narrowly about what’s right in front of you, your mind will start to think about what might come next – and so it will help to prepare you for it.

从狭隘地思考眼前的事情的壓力中解放出來，你的大腦將開始思考接下來可能發生的事情 - 因此這將有助於你為此做好準備。

Up until I met these scientists, I thought that mind-wandering – what I was doing in Provincetown so much, and so pleasurably – was the opposite of attention, and that’s why I felt guilty about doing it. I realised I was wrong.

在我遇到這些科學家之前，我認為走神——我在普羅溫斯敦如此頻繁地、如此愉快地做的事情——與注意力相反，這就是為什麼我對這樣做感到內疚。我意識到我錯了。

It is actually a different form of attention – and a necessary one. Nathan told me that when we narrow our attention down into a spotlight to focus on one thing, that takes ‘a certain amount of bandwidth’, and when we turn off the spotlight, ‘we still have the same bandwidth – it’s just we can allocate more of those resources’ towards other ways of thinking. ‘So it’s not like attention necessarily goes down – it just shifts,’ to other, crucial forms of thinking.

這實際上是一種不同形式的注意力——而且是必要的。內森告訴我，當我們將注意力集中在聚光燈上以專注于一件事時，這需要“一定量的帶寬”，而當我們關閉聚光燈時，“我們仍然擁有相同的帶寬 - 只是我們可以分配更多地將這些資源用於其他思維方式。 “因此，注意力並不一定會下降——它只是轉移到了其他重要的思維方式”。

This, I realised, is quite challenging to the whole way I had been

raised to think about productivity.

我意识到，这对我从小到大思考生产力的整个方式来说是相当具有挑战性的。

I feel instinctively like I've done a good hard day of work when I have been sitting at my laptop, spotlight-focused on tapping out words – at the end of it, I feel a little Puritan rush of pride at my productivity. Our whole culture is built around this belief.

当我坐在笔记本电脑前，全神贯注地敲出文字时，我本能地感觉自己已经完成了一天辛苦的工作——最后，我对自己的生产力感到一丝清教徒式的自豪。我们的整个文化都是围绕这一信念建立的。

Your boss wants to see you sitting at your desk every hour of the day; this is what she thinks work is. This way of thinking is implanted in us from a very young age when, like Marcus Raichle, we are told off at school for daydreaming. That's why, on the days I spent simply wandering aimlessly on the beaches of Provincetown, I didn't feel productive. I thought I was slacking, being lazy, indulging myself.

你的老板希望看到你每时每刻都坐在办公桌前；这就是她认为的工作。这种思维方式从很小的时候就被植入了我们的内心，当时我们就像马库斯·雷克尔一样，在学校里被训斥不要做白日梦。这就是为什么，当我在普罗温斯敦的海滩上漫无目的地闲逛的那些日子里，我并没有感到富有成效。我以为我在懈怠、懒惰、放纵自己。

But Nathan – after studying all this – had found that to be productive, you can't aim simply to narrow your spotlight as much as possible.

但内森（Nathan）在研究了所有这些之后发现，为了提高工作效率，你不能简单地瞄准尽可能缩小你的关注范围。

He said: 'I try to go for a walk every day and just let my mind kind of sort things out... I don't think our full conscious control of our thoughts is necessarily our most productive way of thinking. I think loose patterns of association can lead to unique insight.' Marcus agreed.

他说：“我尝试每天去散步，让我的大脑理清思路……我不认为我们对思想的完全有意识的控制一定是我们最富有成效的思维方式。我认为松

散的关联模式可以带来独特的见解。”马库斯表示同意。

Focusing on what's right in front of you, he told me, gives you 'some of the raw material that has to be digested, but at some point, you need to stand back from that'.

他告诉我，专注于你面前的事情会给你“一些必须消化的原材料，但在某些时候，你需要远离它”。

He warned: 'If we're just frantically running around focusing on the external world exclusively, we miss the opportunity to let the brain digest what's been going on.'

他警告说：“如果我们只是疯狂地跑来跑去，只关注外部世界，我们就会错过让大脑消化正在发生的事情的机会。”

As he said this, I thought about the people I had looked at on the train, staring out the window for hours.

当他说这句话的时候，我想起了我在火车上看到的那些人，他们盯着窗外看了几个小时。

I had been silently judging them for their lack of productivity – but now I realised they may have been more meaningfully productive than me, as I frantically took notes on one book after another, without taking time to sit back and digest.

我一直在默默地评判他们缺乏生产力——但现在我意识到他们可能比我更有生产力，因为我疯狂地在一本又一本的书上做笔记，没有花时间坐下来消化。

The kid in the class who is staring out of the window mind-wandering might be doing the most useful thinking.

班上那个盯着窗外走神的孩子可能正在思考最有用的想法。

I thought back over all the scientific studies I had read about how we spend our time rapidly switching between tasks, and I realised that in our current culture, most of the time we're not focusing, but we're not mind-wandering either.

我回想起我读过的所有关于我们如何花时间在任务之间快速切换的科学研究，我意识到在我们当前的文化中，大多数时候我们没有集中注意力，但我们也没有走神。

We're constantly skimming, in an unsatisfying whirr. Nathan nodded when I asked about this, and told me he is constantly trying to figure out how to get his phone to stop sending him notifications for things he doesn't want to know.

我们总是在不满足的呼呼声中略读。当我问起这个问题时，内森点点头，并告诉我，他一直在想办法让他的手机停止向他发送他不想知道的事情的通知。

All this frenetic digital interruption is 'pulling our attention away from our thoughts', and 'suppressing your default mode network... I think we're almost in this constant stimulus-driven, stimulus-bound environment, moving from one distraction to the next.' If you don't remove yourself from that, it will 'suppress whatever train of thought you had'.

所有这些疯狂的数字干扰正在“将我们的注意力从我们的思想上移开”，并“抑制你的默认模式网络.....我认为我们几乎处于这种持续的刺激驱动、刺激束缚的环境中，从一种干扰转移到另一种干扰。”如果你不摆脱它，它就会‘压制你的任何想法’。

So we aren't just facing a crisis of lost spotlight focus – we are facing a crisis of lost mind-wandering. Together they are degrading the quality of our thinking.

因此，我们不仅面临着失去聚光灯焦点的危机，我们还面临着失去思维漫游的危机。它们共同降低了我们思维的质量。

Without mind-wandering, we find it harder to make sense of the world – and in the jammed-up state of confusion that creates, we become even more vulnerable to the next source of distraction that comes along.

如果没有走神，我们会发现很难理解这个世界，而在由此产生的混乱状态下，我们更容易受到下一个干扰源的影响。

When I interviewed him, Marcus Raichle – who made the breakthrough that opened up this whole area of science – had just given up playing in a symphony orchestra, at the age of eighty. He was an oboe player, and his favourite piece to perform was Dvořák's Ninth Symphony.

当我采访他时，马库斯·雷克尔（Marcus Raichle）——他在整个科学领域取得了突破性进展——刚刚放弃在交响乐团的演奏，享年八十岁。他是一名双簧管演奏家，他最喜欢演奏的作品是德沃夏克的《第九交响曲》。

If you want to think about thinking itself, he told me, you should see it as like a symphony. 'You've got two violin sections, violas, cellos, basses, woodwinds, brass, percussion – but it operates as a whole.

他告诉我，如果你想思考思考本身，你应该把它看作一首交响乐。“你两个小提琴部分、中提琴、大提琴、贝司、木管乐器、铜管乐器、打击乐器——但它是作为一个整体运作的。

It has rhythms.' You need space in your life for the spotlight of focus – but alone, it would be like a solo oboe player on a bare stage, trying to play Beethoven. You need mind-wandering to activate the other instruments and to make the sweetest music. I thought I had come to Provincetown to learn to focus. I realised that, in fact, I was learning to think – and that required much more than the spotlight of focus.

它有节奏。'你的生活中需要空间来成为焦点——但独自一人，这就像一个双簧管独奏者在空荡荡的舞台上试图演奏贝多芬。你需要走神来激活其他乐器并演奏出最甜美的音乐。我以为我来到普罗温斯敦是为了学习集中注意力。我意识到，事实上，我正在学习思考——而这需要的不仅是聚光灯下的焦点。

On the long walks I try to go on now without any devices at all, I spend a lot of time reflecting on Marcus's metaphor. A few days ago, I wondered if it could be taken further.

现在，当我尝试在没有任何设备的情况下进行长途散步时，我花了很多时间思考马库斯的比喻。前几天我就在想，是否可以再进一步。

If thinking is like a symphony that requires all these different kinds of

thought, right now, the stage has been invaded.

如果思维就像一首交响乐，需要所有这些不同类型的思维，那么现在，舞台已经被入侵了。

One of those heavy-metal bands who bite the heads off bats and spit them at the audience has charged the stage, and they are standing in front of the orchestra, screaming.

一支把蝙蝠的头咬下来然后吐向观众的重金属乐队冲上舞台，他们站在管弦乐队的前面，尖叫着。



And yet, as I dug deeper into the research on mind-wandering, I learned there is an exception to what I just explained – and it's a big one. In fact, it is one you have probably experienced.

然而，当我深入研究走神问题时，我发现我刚才解释的情况有一个例外——而且是一个很大的例外。事实上，您可能已经经历过这种情况。

In 2010 the Harvard scientists Professor Dan Gilbert and Dr Matthew Killingsworth developed a web app to study how people feel when they do all sorts of everyday things, from commuting to watching TV to exercising.

2010 年，哈佛大学科学家 Dan Gilbert 教授和 Matthew Killingsworth 博士开发了一款网络应用程序，用于研究人们在做各种日常事务（从通勤、看电视到锻炼）时的感受。

People would get random prompts from the app that would ask: 'What are you doing now?' They would then be asked to rank how they felt.

人们会从应用程序中收到随机提示，询问：“你现在在做什么？”然后他们会被要求对自己的感受进行排名。

One of the things Dan and Matthew tracked was how often people found themselves mind-wandering – and what they discovered was surprising, given everything I had just learned.

丹和马修追踪的一件事是人们发现自己走神的频率——考虑到我刚刚学到的一切，他们的发现令人惊讶。

In general, when people are mind-wandering in our culture, they rank themselves as less happy than when they are doing almost any other activity. Even housework, for example, is associated with higher levels of happiness. They concluded: 'A wandering mind is an unhappy mind.'

一般来说，当人们在我们的文化中走神时，他们会认为自己比从事几乎任何其他活动时都不那么快乐。例如，即使是家务劳动也与更高的幸福感相关。他们的结论是：“心游荡就是不快乐的心。”

I thought about this a lot. Given that mind-wandering has been shown to have so many positive effects, why does it so often make us feel bad? There is a reason for this. Mind-wandering can easily descend into rumination.

我想了很多。既然走神已被证明有如此多的积极影响，为什么它经常让我们感觉不好呢？有一个原因。走神很容易陷入沉思。

Most of us have had that feeling at some point or another – if you stop focusing and let your mind drift, you become jammed up with stressful thoughts. I thought back to my life at many points before Provincetown.

我们大多数人都曾在某个时候有过这种感觉——如果你停止集中注意力并让你的思绪飘忽不定，你就会被充满压力的想法所困扰。我多次回想起自己在普罗温斯敦之前的生活。

When I was sitting on those trains, clucking in my own mind at the people who could sit staring out of the window while I manically worked and worked and worked, what was my mental state? Often, I saw now, I was loaded with stress and anxiety. Any attempt to relax my thinking would have let those bad feelings flood in. In Provincetown, by contrast, I had no stresses, and I felt safe – so my mind-wandering could float freely and do its positive work.

当我坐在那些火车上，心里咯咯地笑着那些坐在窗外盯着窗外的人，而我却疯狂地工作、工作、工作时，我的精神状态是什么？我现在发现，我常常充满压力和焦虑。任何放松我的想法的尝试都会让那些不好的感觉涌入。相比之下，在普罗温斯敦，我没有压力，我感到安全——所以我的思绪可以自由漂浮并发挥积极作用。

In situations of low stress and safety, mind-wandering will be a gift, a pleasure, a creative force. In situations of high stress or danger, mind-wandering will be a torment.

在低压力和安全的情况下，走神将是一份礼物、一种乐趣、一种创造力。在压力大或危险的情况下，走神将是一种折磨。



On the beach in the centre of Provincetown, just off the long strip of Commercial Street, there is a comically large blue wooden chair that faces the ocean. It must be eight feet tall, as if it is waiting for a giant.

在普罗温斯敦市中心的海滩上，就在商业街的长条附近，有一张滑稽的大蓝色木椅，面朝大海。它一定有八英尺高，仿佛在等待一个巨人。

I would often sit on that chair, looking tiny as darkness fell, talking with people I had befriended around the town. Sometimes we would be silent, and simply watch the light change. The light in Provincetown is unlike the light anywhere else I have ever been.

我经常坐在那张椅子上，与镇上我结识的朋友交谈，夜幕降临时，我显得很小。有时我们会保持沉默，只是看着光线的变化。普罗温斯敦的灯光与我去过的其他地方的灯光不同。

You are on a thin, narrow sandbar in the middle of the ocean, and as you sit on that beach, you are facing east. The sun is setting behind you in the west – but its light is flowing forward, onto the water in front of you, and reflecting back into your face.

您位于海洋中央的一个薄而狭窄的沙洲上，当您坐在海滩上时，您面朝东方。太阳正在西边落下，但它的光线向前流动，照射到您面前的水面上，并反射回您的脸上。

You seem to be flooded with the waning light of two sunsets. I watched it with the people I met, and I felt radically open, to them, and to the sun, and to the ocean.

你似乎被两次日落的余辉所淹没。我和我遇到的人一起观看了这部电影，我对他们、阳光和海洋感到完全开放。



One day, about ten weeks into my time in Provincetown, I was sitting alone in my friend Andrew's house with one of his dogs, Bowie, at my feet.

有一天，在我来到普罗温斯敦大约十周后，我独自坐在朋友安德鲁的家里，他的一只狗鲍伊坐在我的脚边。

I was reading a novel and occasionally looking out towards the ocean, when I noticed that Andrew had left his laptop on a chair, open and glowing. On its screen, there was an internet browser. It had no password. There was the World Wide Web, glowing at me.

我正在读一本小说，偶尔望向大海，这时我注意到安德鲁把他的笔记本电脑放在椅子上，打开并发光。它的屏幕上有一个互联网浏览器。它没有密码。万维网正在向我发光。

You could look at the internet now, I thought to myself. You could look at anything you want – your social media, your email, the news. The thought made me feel heavy, and I made myself leave Andrew's house.

我心想，你现在可以上网看看了。你可以查看任何你想看的东西——你的社交媒体、你的电子邮件、新闻。这个想法让我感到沉重，我强迫自己离开安德鲁的家。

But the clock kept running down, and before long, I realised I had only two weeks left. I knew I had to go online to book a hotel for when I went back to Boston. In the Provincetown Library, there is a small bank of six computers that are open to the public. I had walked past them many times and I always averted my gaze, as if they were a toilet stall somebody had accidentally left open.

但时间一直在流逝，不久之后，我意识到我只剩下两周的时间了。我知道当我回到波士顿时我必须上网预订酒店。在普罗温斯敦图书馆，有一个小型银行，有六台电脑向公众开放。我走过它们很多次，但我总是避开我的目光，就好像它们是一个有人不小心打开的厕所隔间。

I logged on and booked the hotel in two minutes, and then opened my email. I thought I knew what was about to happen. I spend around half an hour a day dealing with email in my normal life, spread from morning to night (and sometimes it's drastically more).

我登录并在两分钟内预订了酒店，然后打开了我的电子邮件。我以为我知道将要发生什么。在正常生活中，我每天大约花半个小时处理电子邮件，从早到晚（有时甚至更多）。

So I calculated that in the time I had been away, I had clocked up thirty-five hours' worth of emails that I would now have to plough through over the next few months, scrambling to catch up.

所以我计算了一下，在我离开的这段时间里，我已经处理了三十五个小时的电子邮件，现在我必须在接下来的几个月里努力处理这些电子邮件，争先恐后地赶上。

(When I had gone away, I left an auto-reply saying I was totally uncontactable.) I didn't want it. I felt exhausted just thinking about it.

（当我离开时，我留下了一条自动回复，说我完全无法联系。）我不想要它。光是想想就觉得心力交瘁。

But then something strange happened. I opened my inbox nervously and skimmed through my emails – and there was hardly anything there. In two hours, I had seen everything. The world had accepted my absence with a shrug.

但后来发生了一些奇怪的事情。我紧张地打开收件箱，浏览了一下我的电子邮件——里面几乎没有任何东西。两个小时的时间，我已经看遍了一切。世界耸耸肩，接受了我的缺席。

I realised that email breeds email, and if you just stop, it stops. I would like to say I felt calmed and soothed by this. In truth, I felt affronted – like my ego had been poked with a knitting needle.

我意识到电子邮件会催生电子邮件，如果你停下来，它就会停止。我想说的是，我对此感到平静和安慰。事实上，我感到被冒犯了——就像我的自尊被一根织针刺痛了一样。

All this mania, all these demands on my time, I realised, made me feel important. I wanted in a sudden rush to send emails in order to get emails back – to feel needed again. I clicked over to my Twitter feed. I had precisely the same number of Twitter followers that I had when I left. My absence had been entirely unnoticed.

我意识到，所有这些狂热，所有这些对我时间的要求，让我感到自己很重要。我想突然急于发送电子邮件以便收回电子邮件——再次感到被需要。我点击了我的推特。我的推特粉丝数量与我离开时完全相同。我的缺席完全没有引起人们的注意。

I wandered away from the library and returned to the things that had given me nourishment in Provincetown – long passages of writing flowed from me; the ocean washed over my feet; my friends sat with me and talked all night. I tried to forget the wound to my ego.

我离开了图书馆，回到了普罗温斯敦给我营养的地方——长篇大论的文字从我身上流淌出来；海水冲刷着我的脚；我的朋友们和我坐在一起聊了一整晚。我试图忘记我的自尊心受到的伤害。

On my last day in Provincetown, I took a boat out to Long Point, which is the tip of the tip of Cape Cod, a yellow crest of sand and sea.

在普罗温斯敦的最后一天，我乘船前往长角，这是科德角的尖端，是黄色的沙滩和大海的顶峰。

There, I could look back over the whole of the place where I had spent my summer, stretching from the Pilgrim Monument all the way down to Hyannis. It was a peculiar feeling, to see the boundaries of my summer in one single scan of the horizon.

在那里，我可以回顾我度过夏天的整个地方，从朝圣者纪念碑一直延伸到海恩尼斯。一次扫视地平线就能看到我夏天的边界，这是一种奇特的感觉。

I felt more still and centred than I ever had before in my life.

我感到前所未有的平静和专注。

You can't just go back and live the way you used to, I told myself, sitting in the shadow of the lighthouse. It's not hard. This summer has shown you how to do it. I demonstrated pre-commitment by cutting myself off. You can show pre-commitment in your everyday life now. I already owned the tools. On my laptop, I have a program called Freedom. It's easy – you download it, and you tell it you want it to deny you access to a specific website, or to the entire internet, for an amount of time you designate, from five minutes to a week. You hit

the button, and no matter what you do, your laptop won't get online.

你不能再像以前那样生活了，我坐在灯塔的阴影下告诉自己。这并不难。今年夏天已经向您展示了如何做到这一点。我通过切断自己的联系来展示预先承诺。您现在可以在日常生活中表现出预先承诺。我已经拥有这些工具了。在我的笔记本电脑上，我有一个名为 Freedom 的程序。这很简单——你下载它，然后告诉它你希望它在你指定的时间内（从五分钟到一周）拒绝你访问特定网站或整个互联网。你按下按钮，无论你做什么，你的笔记本电脑都无法上网。

And for my phone, I owned something called a kSafe. Again, it's simple – it's a little plastic safe that opens at the top. You put your phone in it, and you put the lid on, and you twist the top to determine how long you want to shut your phone away for.

对于我的手机，我拥有一个叫做 kSafe 的东西。同样，它很简单——它是一个从顶部打开的小塑料保险箱。你把手机放进去，盖上盖子，然后转动顶部来确定你想关闭手机多长时间。

Then it's gone – locked away, so you'd have to smash it with a hammer to get the phone out. Using these two devices, I said to myself, you can recreate Provincetown wherever you are.

然后它就消失了——被锁起来，所以你必须用锤子敲碎它才能把手机拿出来。我对自己说，使用这两个设备，无论您身在何处，都可以重建普罗温斯敦。

You can use your phone and the internet part of your laptop for maybe ten or fifteen minutes a day.

您每天可以使用手机和笔记本电脑的互联网部分大约十到十五分钟。

That evening, I gave away the small mountain of books I had read, and boarded the ferry to Boston. I got violently seasick on the journey back, and it felt like a rude metaphor for how I felt about returning to the online world.

那天晚上，我把读过的小山书送出去，登上了去波士顿的渡轮。在回来的路上我晕船得很厉害，这感觉就像是对我回到网络世界的感受的粗鲁隐喻。

I reclaimed my phone from my friend the next day, and I lay on my hotel bed staring at it. It seemed strangely alien now – even the Apple font looked unfamiliar. I found myself flicking between icons, looking at various programs and websites.

第二天，我从朋友那里拿回了手机，躺在酒店的床上，盯着它。现在它看起来很奇怪——甚至苹果字体看起来都很陌生。我发现自己在图标之间切换，查看各种程序和网站。

I looked at social media and thought, I don't want this. I flicked through Twitter and felt like I had stood on a termites' nest. When I looked up, three hours had gone.

我查看了社交媒体并想，我不想要这个。我刷了推特，感觉自己就像站在白蚁巢上。抬头一看，三个小时过去了。

I left it behind and went to eat. When I got back, people had started replying to my emails and texts, and despite myself, I felt a little rush of affirmation.

我把它留在一边去吃饭了。当我回来时，人们已经开始回复我的电子邮件和短信，尽管我自己不情愿，但我还是感到有点急切的肯定。

In the next few weeks, I started to post on social media – and I felt myself become cruder and meaner than I had been in the summer. I made snarky comments. The complexity and compassion I had felt in Provincetown was, I felt, being replaced by something thinner.

在接下来的几周里，我开始在社交媒体上发帖——我感觉自己变得比夏天更粗鲁、更刻薄了。我发表了尖锐的评论。我觉得，我在普罗温斯敦感受到的复杂性和同情心正在被更薄弱的东西所取代。

At moments I didn't like what I was saying. And then I felt the slow rush of approval, the retweets, the likes. I want to tell you that I learned the lessons of my time in Provincetown in a linear and life-affirming way, but that would be a lie. What happened was more complex.

有时我不喜欢我所说的话。然后我感受到了认可、转发和点赞的缓慢涌动。我想告诉你，我在普罗温斯敦的时光以一种线性的、肯定生活的方式吸取了教训，但这将是一个谎言。发生的事情更为复杂。

I left Provincetown in August, and I used Freedom and the kSafe, and slowly it slipped, and by December, the Screen Time on my iPhone indicated that I was spending four hours a day on my phone. I told myself that includes using Google Maps to navigate the city, and the hours I spent listening to podcasts and the radio and audiobooks. But I felt ashamed when I thought of it. I wasn't quite back to where I had been at the start, but I had clearly slid into distraction and disruption.

我八月离开普罗温斯敦，使用 Freedom 和 kSafe，慢慢地它就下滑了，到了 12 月，我 iPhone 上的屏幕使用时间表明我每天花四个小时在手机上。我告诉自己，这包括使用谷歌地图在城市中导航，以及花时间听播客、广播和有声读物。但一想起来我就感到羞愧。我并没有完全回到一开始的状态，但我显然已经陷入了分心和混乱。

I felt like a failure. I had a strong sensation that something was pulling me down. Then I told myself: You're making excuses for yourself. You are doing this, nobody else. These are your failings. And I felt weak.

我感觉自己很失败。我有一种强烈的感觉，有什么东西正在把我拉下来。然后我告诉自己：你这是在为自己找借口。你在做这件事，没有其他人。这些都是你的缺点。我感到很虚弱。

I had gained a lot of insights in Provincetown – but I felt they were fragile, and easily broken by something bigger, something I didn't quite yet understand.

我在普罗温斯敦获得了很多见解，但我觉得它们很脆弱，很容易被更大的、我还不太理解的东西所打破。

I wanted to know what was preventing me from doing what I wanted, in the better part of myself, to do. I discovered that the answer is more complex than we have been led to believe, and has many facets – and I learned about the first of them when I went to Silicon Valley.

我想知道是什么阻碍了我做我想做的事，在我自己更好的部分，做。我发现答案比我们想象的更复杂，并且有很多方面——当我去硅谷时，我了解了第一个方面。

Cause Six: The Rise of Technology That Can Track and Manipulate You (Part One)

6

6 原因六：可以跟踪和操纵您的技术的兴起 (第一部分)

James Williams told me I had made a fundamental mistake in Provincetown. He was a senior Google strategist for many years, and he left, horrified, to go to Oxford University, to study human attention, and figure out what his colleagues in Silicon Valley have done to it. He told me a digital detox is ‘not the solution, for the same reason that wearing a gas mask for two days a week outside isn’t the answer to pollution. It might, for a short period of time, keep, at an individual level, certain effects at bay.

詹姆斯·威廉姆斯告诉我，我在普罗温斯敦犯了一个根本性的错误。他在谷歌担任了多年的高级战略师，他惊恐地离开了，去了牛津大学，研究人类的注意力，并弄清楚他在硅谷的同事对注意力做了什么。他告诉我，数字排毒“不是解决办法，就像每周在户外戴防毒面具两天也不能解决污染一样。”它可能会在短时间内在个人层面上抑制某些影响。

But it’s not sustainable, and it doesn’t address the systemic issues.’ He said our attention is being deeply altered by huge invasive forces in the wider society.

但这是不可持续的，也不能解决系统性问题。”他说，我们的注意力正在

被更广泛社会中的巨大入侵力量深刻改变。

Saying the solution is primarily to personally abstain is just ‘pushing it back onto the individual’, he said, when ‘it’s really the environmental changes that will really make the difference’.

他说，如果说解决方案主要是个人戒酒，那只是“把它推回到个人身上”，而“真正产生影响的是环境的变化”。

For a long time I didn’t really understand what this meant. What would changing our environment entail, when it came to attention, if not each of us trying to change our own personal behaviour?

很长一段时间我都不太明白这意味着什么。如果我们每个人都没有努力改变自己的个人行为，那么当我们开始关注时，改变我们的环境会带来什么？

The answer slowly became clear to me when I met with many people who had designed crucial aspects of the world in which we now live.

当我遇到许多设计了我们现在生活的世界的关键方面的人时，我慢慢地明白了答案。

In the hills of San Francisco and the hot, arid streets of Palo Alto, I realised that there are six ways in which our technology, as it currently works, is harming our ability to pay attention – and that these causes are united by one deeper underlying force that needs to be overcome.

在旧金山的山丘和帕洛阿尔托炎热、干旱的街道上，我意识到我们的技术目前正在以六种方式损害我们的注意力——而这些原因是由一个更深层次的原因统一起来的。需要克服的潜在力量。

One of the first people to guide me on this journey was Tristan Harris, another former Google engineer, who, after I had been interviewing him for several years, became globally famous for appearing in the viral Netflix documentary *The Social Dilemma*. That film explored a whole range of ways in which social media, as it is currently designed, can be destructive. I wanted to tease out something the film largely didn’t explore – its effect on our focus.

特里斯坦·哈里斯（Tristan Harris）是最早在这段旅程中引导我的人之一，他是另一位前谷歌工程师，在我对他进行了几年的采访后，他因出现在 Netflix 热门纪录片《社会困境》中而闻名于世。该电影探索了社交媒体（按目前的设计）可能具有破坏性的一系列方式。我想梳理出电影基本上没有探讨的一些东西——它对我们注意力的影响。

To grasp it, I think it helps to know Tristan's own story, and what he witnessed at the heart of the machine that is repatterning the world's attention.

为了理解这一点，我认为了解特里斯坦自己的故事以及他在正在重新塑造世界注意力的机器的核心所目睹的一切会有所帮助。



In the early 1990s, in the town of Santa Rosa, California, a little boy with a bowl haircut and a bright golden bow tie was learning magic. Tristan was seven years old when he first tried out one of the most basic tricks. He would ask you to hand him a coin, and then – poof! It was gone.

20世纪90年代初，在加利福尼亚州圣罗莎小镇，一个留着碗形发型、系着亮金色领结的小男孩正在学习魔法。特里斯坦第一次尝试最基本的技巧时才七岁。他会要求你递给他一枚硬币，然后——噗！它不见了。

After he mastered more tricks, he put on a magic show for his elementary-school class, and then – to his glee – he was selected to go to a magic camp out in the hills, where he was taught for a week by professional magicians. It seemed to him like a real-life Jedi training camp.

在他掌握了更多魔术之后，他为小学班级表演了魔术表演，然后令他高兴的是，他被选中去山上的魔术营，在那里由专业魔术师教他一周。在他看来，这就像一个现实生活中的绝地训练营。

He discovered, at this young age, the most important fact about magic. He explained years later: 'It's really about the limits of attention.' The job of a magician is – at heart – to manipulate your focus.

他在很小的时候就发现了关于魔法的最重要的事实。多年后他解释道：“这实际上是关于注意力的极限。”魔术师的工作本质上就是操纵你

的注意力。

That coin didn't really vanish – but your attention was somewhere else when the magician moved it, so when your focus comes back to the original spot, you're amazed.

那枚硬币并没有真正消失——但当魔术师移动它时，你的注意力转移到了其他地方，所以当你的注意力回到原来的位置时，你会感到惊讶。

To learn magic is to learn to manipulate someone's attention without them even realising it – and once the magician controls their focus, Tristan realised, he can do what he wants.

学习魔法就是学会在别人没有意识到的情况下操纵他们的注意力——特里斯坦意识到，一旦魔术师控制了他们的注意力，他就可以做他想做的事。

One of the things that he was taught at camp is that a person's susceptibility to magic has nothing to do with their intelligence. 'It's about something more subtle,' he said later.

他在营地学到的一件事是，一个人对魔法的敏感性与他们的智力无关。“这是关于一些更微妙的事情，”他后来说。

It's 'about the weaknesses, or the limits, or the blind spots, or the biases that we're all trapped inside of'.

这是“关于我们都陷入其中的弱点、限制、盲点或偏见”。

Magic, in other words, is the study of the limits of the human mind. You think you control your attention; you think that if somebody messes with it, you will know, and you'll be able to spot and resist it right away, but, in reality, we are fallible sacks of meat, and we are fallible in predictable ways that can be figured out by magicians and messed with.

换句话说，魔法是对人类思维极限的研究。你认为你可以控制自己的注意力；你认为如果有人弄乱了它，你就会知道，你就能立即发现并抵制它，但实际上，我们是容易犯错的肉袋，而且我们会以可预测的方式犯错，这是可以计算出来的被魔术师弄乱了。

As he got to know better and better magicians – eventually

befriending one of the best in the world, Derren Brown – Tristan learned something he found both remarkable and disconcerting. It is possible to manipulate your attention to such a degree that a magician can, in many cases, turn you into his puppet.

随着他对魔术师的了解越来越多，最终与世界上最好的魔术师之一达伦·布朗成为朋友，特里斯坦学到了一些他觉得既非凡又令人不安的东西。魔术师可以将你的注意力操纵到一定程度，以至于在很多情况下，魔术师可以将你变成他的傀儡。

He can make you choose whatever he wants you to choose, while all along you think you're simply using your own free will. When Tristan first said this to me, I thought he was overstating his case, so he introduced me to another of his magician friends, James Brown. Tristan told me James would show me what it meant. I'll give you one example.

他可以让你选择他想让你选择的任何东西，而你却一直认为你只是在使用自己的自由意志。当特里斯坦第一次对我说这句话时，我认为他夸大了自己的情况，所以他向我介绍了他的另一位魔术师朋友詹姆斯·布朗。特里斯坦告诉我詹姆斯会告诉我这意味着什么。我给你举一个例子。

When we sat together, James showed me a standard pack of cards. He said See? Some of them are red, and some of them are black, and they are all mixed up together. Then he turned the cards so the colours were facing towards him, and I couldn't see them any more.

当我们坐在一起时，詹姆斯给我看了一副标准的扑克牌。他说看到了吗？有的红，有的黑，都混在一起了。然后他把卡片翻转过来，让颜色面向他，我就再也看不到它们了。

He told me he was going to get me to sort them neatly into two piles – one black, one red – without me ever getting to look at the colour of the cards for myself. It was, obviously, impossible. How could I sort cards I couldn't see?

他告诉我，他要让我把它们整齐地分成两堆——一黑一红——而我却没有机会亲自查看卡片的颜色。显然，这是不可能的。我如何对看不到的卡片进行排序？

He told me to look into his eyes, and – entirely using my own free will – to tell him whether to put the next card into a pile on the left, or a pile on the right. So I gave him my orders – left, left, right, and so on – according to what I was confident were my own random whims. At the end, he lifted up the piles of cards and showed them to me.

他让我看着他的眼睛，然后——完全用我自己的自由意志——告诉他是将下一张牌放到左边的一堆，还是右边的一堆。所以我给了他我的命令——左、左、右等等——根据我确信是我自己的随机想法。最后，他举起成堆的卡片给我看。

The red cards were neatly in one pile; the black cards were in the other.

红牌整齐地堆成一堆；黑卡在另一张。

I was baffled. How did he do it? He eventually told me he had been subtly guiding my choices. He did it again, and said he would do it a little more crudely this time, to see if I could spot it. Finally – and he had to be pretty blatant – I saw it.

我很困惑。他是怎么做到的呢？他最终告诉我，他一直在巧妙地指导我的选择。他又做了一次，并说这次他会做得更粗糙一点，看看我是否能发现它。最后——他必须非常明目张胆——我看到了。

When he told me to pick at the next card, he indicated very slightly with his eyes to the left or to the right – and I always chose in the way he unconsciously guided me to. Everyone always does, he told me.

当他让我选择下一张牌时，他的眼睛轻轻地向左或向右示意——而我总是按照他无意识引导我的方式进行选择。他告诉我，每个人总是这样。

Later, Tristan explained to me that this is a core insight of magic – you can manipulate people and they don't even know it's happening. They will swear to you that they made their own free choices – as I would have about those cards.

后来，特里斯坦向我解释说，这是魔法的核心见解——你可以操纵人们，而他们甚至不知道它正在发生。他们会向你发誓，他们做出了自己的自由选择——就像我对这些卡片所做的那样。

One morning, in his office in San Francisco, Tristan leaned forward and said to me: ‘How does a magician do their work? It works because they don’t have to know your strengths – they just have to know your weaknesses.

一天早上，在他位于旧金山的办公室里，特里斯坦向前倾身对我说：“魔术师是如何完成他们的工作的？”它之所以有效，是因为他们不必知道你的优势——他们只需要知道你的劣势即可。

How well do you know your weaknesses?’ I wanted to believe I understood my weaknesses very well, but Tristan shook his head gently. ‘If people did know their weaknesses,’ he said, ‘then magic wouldn’t work.’

你对自己的弱点了解多少？”我想相信我非常了解自己的弱点，但特里斯坦轻轻地摇了摇头。“如果人们确实知道自己的弱点，”他说，“那么魔法就行不通了。”

Magicians play on these weaknesses to delight and entertain us. As Tristan grew up, he became part of another group of people who were figuring out our weaknesses to manipulate us – but they had very different goals.

魔术师利用这些弱点来取悦和娱乐我们。随着特里斯坦长大，他成为了另一群人的一员，他们试图找出我们的弱点来操纵我们——但他们的目标却截然不同。



It was in his first year at Stanford University, in 2002, that Tristan first heard whispers of a course on campus that took place in a mysterious-sounding place known as the Persuasive Technologies Lab. It was, the rumours went, a place where scientists were figuring out how to design technology that could change your behaviour – without you even knowing you were being changed.

2002 年，特里斯坦在斯坦福大学就读的第一年，第一次听到校园里一门课程的传闻，该课程在一个听起来很神秘的地方——说服性技术实验室（Persuasive Technologies Lab）进行。有传言称，科学家们正在研究如何设计可以改变你行为的技术——而你甚至不知道自己正在被改变。

In his teens Tristan had become obsessed with coding, and he had already been an intern at Apple after his freshman year at Stanford, designing a piece of code that is still used in many of your devices today.

特里斯坦在十几岁的时候就迷上了编码，在斯坦福大学读完一年级后，他就已经在苹果公司实习，设计了一段代码，至今仍在许多设备中使用。

This secretive and much-discussed course, he learned, was about taking everything scientists had discovered over the twentieth century about how to change other people's behaviour, and figuring out how the students could integrate these forms of persuasion into their code.

他了解到，这门秘密且引起广泛讨论的课程旨在利用科学家在二十世纪发现的有关如何改变他人行为的一切知识，并弄清楚学生如何将这些说服形式融入他们的代码中。

The course was taught by a warm, upbeat Mormon behavioural scientist in his forties named Professor B.J. Fogg. At the start of each day, he would take out a stuffed frog and a cuddly monkey and introduce them to the class, and then he would play on his ukulele. Whenever he wanted the group to break or wrap up, he would tap on a toy xylophone. B.J.

该课程由一位热情、乐观、四十多岁的摩门教行为科学家 B.J. Fogg 教授教授。每天开始时，他都会拿出一只毛绒青蛙和一只可爱的猴子，把它们介绍给全班同学，然后他会弹奏尤克里里。每当他想让乐队解散或结束时，他就会敲击玩具木琴。 B.J.

explained to students that computers had the potential to be far more persuasive than people. They can, he believed, 'be more persistent than human beings, [and] offer greater anonymity', and 'go where humans cannot go or may not be welcome'. Soon, he was sure, they would be changing the lives of everyone – persuading us persistently, throughout the day.

向学生解释说，计算机比人更有说服力。他相信，它们可以“比人类更持久，[并且]提供更大的匿名性”，并且“去人类不能去或可能不受欢迎的地方”。他确信，很快他们就会改变每个人的生活——全天坚持不懈地说服我们。

He had previously worked on a course dedicated to ‘the psychology of mind control’.

他之前曾修读过一门专门研究“精神控制心理学”的课程。

He assigned to Tristan and his other students a small mound of books which explained hundreds of psychological insights and tricks that had been discovered about how to manipulate human beings and to get them to do what you want. It was a treasure trove.

他给特里斯坦和他的其他学生分配了一小堆书，其中解释了数百种心理学见解和技巧，这些见解和技巧是关于如何操纵人类并让他们做你想做的事的。这是一个宝库。

Many of them were based on the philosophy of B.F. Skinner, the man who, as I had learned earlier, had found a way to get pigeons and rats and pigs to do whatever he wanted by offering the right ‘reinforcements’ for their behaviour. After years of falling out of fashion, his ideas were back with full force.

其中许多都是基于 B.F. 斯金纳 (B.F. Skinner) 的哲学，正如我之前了解到的，他找到了一种方法，通过为鸽子、老鼠和猪的行为提供正确的“强化”，让它们做他想做的事。在淡出时尚界多年之后，他的想法又全面回归。

‘It really woke up the magic part of me,’ Tristan told me. ‘I was like – oh wow, there really are these invisible rules that govern what people do. And if there are rules that govern what people do, that’s power. That’s like Isaac Newton discovering the laws of physics. It felt like somebody’s showing me the code – the code of how you can influence people.’

“这真的唤醒了我身上神奇的部分，”特里斯坦告诉我。 “我当时想——哇哦，真的有这些看不见的规则控制着人们的行为。如果有规则来规范人们的行为，那就是权力。这就像艾萨克·牛顿发现物理定律一样。感觉就像有人在向我展示代码——如何影响他人的代码。”

I remember the experience of sitting there in the graduate area of campus reading those books over the weekends, and underlining furiously these passages, and just being like – oh my God, I can’t even

believe that works.’ He was so intoxicated by the excitement of it that, he says, ‘I will admit, I don’t think the ethical bells were firing in my brain yet.’

我记得周末坐在校园研究生区阅读这些书的经历，并疯狂地在这些段落下划线，然后就像——天哪，我甚至不敢相信这有效。令人兴奋的是，他说，“我承认，我认为道德的钟声还没有在我的大脑中响起。”

As part of the class, he was paired with a young man named Mike Krieger, and they were tasked with designing an app. Tristan had been thinking for a while about something named seasonal affective disorder – a condition where, if you are stuck in gloomy weather for a long time, you are more likely to become depressed. How, they asked, could technology help with that?

作为课程的一部分，他与一位名叫迈克·克里格的年轻人配对，他们的任务是设计一款应用程序。特里斯坦一直在思考一种叫做季节性情感障碍的疾病——如果你长期处于阴沉的天气里，你就更有可能变得抑郁。他们问道，技术如何帮助解决这个问题？

They came up with an app called Send the Sunshine. Two friends would choose to be connected through it, and it would track where they both were and the online weather reports for their locations.

他们想出了一款名为“发送阳光”的应用程序。两个朋友会选择通过它进行联系，它会跟踪他们两人的位置以及他们所在位置的在线天气预报。

If the app realised that your friend was starved of sunshine, and you had some, it would prompt you to take a photo of the sun and send it to him. It showed that somebody cared; and it sent some sunshine your way. It was sweet, and simple, and it helped to spur Mike and another person on the course, named Kevin Systrom, to think about the power of sharing photographs online. They were already thinking about another of the key lessons of the class, taken from B. F. Skinner: build in immediate reinforcements.

如果应用程序意识到你的朋友缺乏阳光，而你有阳光，它会提示你拍一张太阳的照片并发送给他。这表明有人关心；它给你带来了一些阳光。这很甜蜜，也很简单，它有助于激励迈克和课程中的另一个人凯文·斯特罗姆思考在线分享照片的力量。他们已经在思考该课程的另一个重要课程，该课程来自 B. F. Skinner：立即强化。

If you want to shape the user's behaviour, make sure he gets hearts and likes right away. Using these principles, they launched a new app of their own. They named it Instagram.

如果你想塑造用户的行为，请确保他立即获得关注和喜欢。利用这些原则，他们推出了自己的新应用程序。他们将其命名为 Instagram。

The class was filled with people who were going to use the techniques B.J. taught to change how we live our lives, and B.J. was quickly dubbed 'the millionaire maker'. But something was starting to nag at Tristan.

课堂上挤满了想要使用 B.J. 教授的技术来改变我们生活方式的人，B.J. 很快就被称为“百万富翁制造者”。但有件事开始困扰特里斯坦。

After a while, he noticed he had become obsessed with checking his email. He would do it repetitively, mindlessly, again and again, and he felt his attention span was beginning to atrophy.

过了一会儿，他发现自己开始沉迷于检查电子邮件。他会不假思索地重复做这件事，一次又一次，他感觉自己的注意力开始萎缩。

He realised, he told me, that the email app he was using 'operates on a bunch of different levers, and it's very powerful, and it sucks, and it's super-stressful, and it ruins hours and hours of people's lives'. He had been learning in the Persuasive Technologies Lab to hack people, but he came to ask a disconcerting question: am I somehow being hacked by other tech designers myself? He wasn't yet sure how they might be doing it – but he began to have a strange feeling about it. B.J.

他告诉我，他意识到他正在使用的电子邮件应用程序“在一堆不同的杠杆上运行，它非常强大，但很糟糕，而且压力很大，它毁了人们的生活”。他一直在说服技术实验室学习如何黑客攻击，但他提出了一个令人不安的问题：我自己是否也被其他技术设计师黑客攻击了？他还不确定他们会怎么做——但他开始有一种奇怪的感觉。 B.J.

taught his students that they should only use these powers for good, and he laced ethical debates throughout his course. Yet Tristan was going to start to wonder – were these secrets, this code, actually being used ethically in the real world?

他教导他的学生，他们只能将这些权力用于善意，并且他在整个课程中融入了道德辩论。然而特里斯坦开始怀疑——这些秘密、这些代码是否真的在现实世界中以合乎道德的方式使用？

In the final class Tristan attended, all the students discussed ways in which these persuasive technologies could be used in the future. One of the other groups had come up with an eye-catching plan.

在特里斯坦参加的最后一堂课上，所有学生都讨论了未来如何使用这些有说服力的技术。其他一组提出了一个引人注目的计划。

They asked: ‘What if in future you had a profile of every single person on earth?’ As a designer, you would track all the information they offer up on social media and build up a detailed profile of them. It’s not just the simple stuff – their gender, or age, or interests.

他们问：“如果将来你拥有地球上每个人的个人资料怎么办？”作为设计师，你会跟踪他们在社交媒体上提供的所有信息并建立他们的详细资料。这不仅仅是简单的事情——他们的性别、年龄或兴趣。

It would be something deeper. This would be a psychological profile – figuring out how their personality works, and the best ways to persuade them. It would know if the user was an optimist or pessimist, if they were open to new experiences or they were prone to nostalgia – it would figure out dozens of characteristics they have.

这将是更深层次的东西。这将是一个心理概况——弄清楚他们的性格是如何运作的，以及说服他们的最佳方法。它会知道用户是乐观主义者还是悲观主义者，他们是否愿意接受新体验还是容易怀旧——它会找出他们拥有的数十种特征。

Think, the class wondered out loud, about how you could target people if you knew this much about them. Think about how you could change them.

同学们大声地想知道，如果你对人们了解这么多，你如何才能瞄准他们。想想你可以如何改变它们。

When a politician or a company wants to persuade you, they could pay a social-media company to perfectly target their message just for you. It was the birth of an idea. Years later, when it was revealed that the campaign for Donald Trump had paid a company named

Cambridge Analytica to do exactly that, Tristan would think of that final class in Stanford. ‘This was the class that freaked me out,’ he told me. ‘I remember saying – this is horribly concerning.’

当政客或公司想要说服你时，他们可以付费给社交媒体公司，让他们完美地为你传达他们的信息。这是一个想法的诞生。多年后，当有人透露唐纳德·特朗普的竞选团队已向一家名为剑桥分析公司的公司支付了这笔费用时，特里斯坦会想起斯坦福大学的最后一堂课。“这堂课让我感到害怕，”他告诉我。“我记得我说过——这太令人担忧了。”



But Tristan had a deep belief in the power of tech to do good. So he took what he had learned at Stanford and designed an app with a straightforward positive purpose. He was trying to stop one of the ways the web screws with our attention.

但特里斯坦坚信科技的力量可以行善。因此，他利用在斯坦福大学学到的知识，设计了一款具有简单积极目的的应用程序。他试图阻止网络干扰我们注意力的方式之一。

Let’s say you are checking out the CNN site, and you start to read a news story about Northern Ireland, a topic you don’t know much about.

假设您正在查看 CNN 网站，并开始阅读有关北爱尔兰的新闻报道，这是一个您不太了解的话题。

Normally, you will then open a new window and begin googling for info – and before you know it, you vanish down a rabbit hole and emerge half an hour later, lost in articles and videos about a totally different topic (usually cats playing the piano).

通常情况下，你会打开一个新窗口并开始谷歌搜索信息——在你意识到之前，你就会消失在兔子洞里，半小时后出现，迷失在关于完全不同主题的文章和视频中（通常是弹钢琴的猫）。

Tristan’s app was designed so that in this situation, you could do something different: you highlight any phrase (say, ‘Northern Ireland’), and it would pull up a simple pop-up window giving you a straightforward summary of the topic.

特里斯坦的应用程序的设计是为了在这种情况下，你可以做一些不同的事情：你突出显示任何短语（例如“北爱尔兰”），它会弹出一个简单的弹出窗口，为你提供该主题的简单摘要。

No clicking away from the site; no rabbit holes. Your attention is preserved. The app did well – it started to be used by thousands of websites, including the *New York Times*, and quite soon, Google made a substantial offer to buy the whole thing and for Tristan to come and work for them. They told him it was so he could integrate it into their web browser, Chrome, and make people less distracted. He jumped at the chance.

无需点击离开网站；没有兔子洞。您的注意力会得到保留。该应用程序做得很好——它开始被包括《纽约时报》在内的数千个网站使用，很快，谷歌就提出了收购整个应用程序的实质性报价，并让特里斯坦来为他们工作。他们告诉他，这样他就可以将其集成到他们的网络浏览器 Chrome 中，让人们不那么分心。他抓住了这个机会。

It is hard to convey, Tristan believes, quite what it was like to go to work for Google at that moment in history, in 2011. Every day, the company he worked for – from its base, the Googleplex in Palo Alto – was shaping and reshaping how 1 billion people navigated their way through the world: what they got to see, and what they didn't.

特里斯坦认为，在 2011 年这一历史时刻，在谷歌工作的感觉很难描述。每天，他工作的公司——从位于帕洛阿尔托的 Googleplex——都在塑造重塑 10 亿人的出行方式：他们看到了什么，没有看到什么。

He told one audience later: 'I want you to imagine walking into a room. A control room, with a bunch of people, a hundred people, hunched over a desk with little dials – and that that control room will shape the thoughts and feelings of a billion people.

他后来告诉一位观众：“我希望你们想象一下走进一个房间。一个控制室，有一群人，一百个人，弓着背在一张有小表盘的桌子上——而那个控制室将塑造十亿人的想法和感受。

This might sound like science fiction, but this actually exists right now, today.

这可能听起来像科幻小说，但这确实存在于今天。

I know, because I used to work in one of those control rooms.’

我知道，因为我曾经在其中一间控制室工作过。”

Tristan was assigned for a while to work on the development of Gmail, Google’s email system – precisely the app that was driving him wild, and that he suspected might be using some manipulative tricks he hadn’t yet figured out.

特里斯坦有一段时间被指派开发 Gmail（谷歌的电子邮件系统）——正是这个应用程序让他发疯，他怀疑该应用程序可能使用了一些他尚未弄清楚的操纵技巧。

Even as he worked on it, he would obsessively check his email, making him less focused, and whenever he looked at a new message, he found it took him a long time to get his mind back to where it had been before.

即使在他工作的时候，他也会着迷地检查他的电子邮件，这让他注意力不集中，每当他看到一条新邮件时，他发现他需要很长时间才能让自己的思绪回到之前的状态。

He started trying to think through how you might design a system of email that was less prone to nuking your attention – but whenever he tried to discuss this idea with his colleagues, the conversation didn’t seem to go far.

他开始尝试思考如何设计一个不太容易吸引你注意力的电子邮件系统——但每当他试图与同事讨论这个想法时，谈话似乎并没有走得太远。

At Google, he quickly learned, success was measured, in the main, by what was called ‘engagement’ – which was defined as minutes and hours of eyeballs on the product. More engagement was good; less engagement was bad. This was for a simple reason.

在谷歌，他很快了解到，衡量成功的标准主要是所谓的“参与度”——它的定义是人们在产品上停留的分钟和小时。更多的参与是好事；较少的参与是不好的。原因很简单。

The longer you make people look at their phones, the more advertising they see – and therefore the more money Google gets.

你让人们看手机的时间越长，他们看到的广告就越多，因此谷歌获得的钱就越多。

Tristan's co-workers were decent people, struggling with their own tech distractions – but the incentives seemed to lead only one way: you should always design products that 'engage' the maximum number of people, because engagement equals more dollars, and disengagement equals fewer dollars.

特里斯坦的同事都是正派的人，正在与自己的技术干扰作斗争——但激励措施似乎只有一种方式：你应该始终设计能够“吸引”最大数量的人的产品，因为参与等于更多的美元，而脱离则意味着更少的美元美元。

With each month that passed, Tristan became more startled by the casualness with which the attention of a billion people was being corroded at Google and the other Big Tech companies. One day he would hear an engineer excitedly saying: 'Why don't we make it buzz your phone every time we get an email?' Everyone would be thrilled – and a few weeks later, all over the world, phones began to buzz in pockets, and more people found themselves looking at Gmail more times a day.

每个月过去了，特里斯坦对谷歌和其他大型科技公司十亿人的注意力被如此随意地腐蚀而感到更加震惊。有一天，他会听到一位工程师兴奋地说：“为什么我们不让它在每次收到电子邮件时让您的手机发出嗡嗡声？”每个人都会很兴奋 – 几周后，世界各地的电话开始嗡嗡作响。口袋里的钱越来越多，越来越多的人发现自己每天查看 Gmail 的次数越来越多。

The engineers were always looking for new ways to suck eyeballs onto their program and keep them there. Day after day, he would watch as engineers proposed more interruptions to people's lives – more vibrations, more alerts, more tricks – and they would be congratulated.

工程师们一直在寻找新的方法来吸引人们的注意力并让他们留在那里。日复一日，他会看到工程师提出对人们的生活进行更多干扰——更多振动、更多警报、更多技巧——而他们会受到祝贺。

As the number of people using Google and Gmail continued to spike up, Tristan started to ask his colleagues: ‘How do you ethically persuade two billion people’s minds?... How do you ethically structure two billion people’s attention?’ But instead, he found that most other people in the company were being pushed to ask simply, ‘How can we make this more engaging?’ And that meant more attention-sucking, more interrupting; on and on it went, with better techniques being discovered every week.

随着使用 Google 和 Gmail 的人数持续激增，特里斯坦开始问他的同事：“你如何在道德上说服 20 亿人的思想？.....你如何在道德上构建 20 亿人的注意力？”但相反，他发现：公司里的大多数其他人都被迫简单地问：“我们怎样才能让这件事变得更有吸引力？”这意味着更多的注意力吸引，更多的干扰；如此周而复始，每周都会发现更好的技术。

One day, when we were walking in San Francisco, Tristan said to me: ‘Things look pretty bad from the outside, but when you’re on the inside, things can look even worse.’ Tristan was starting to realise: it’s not your fault you can’t focus. It’s by design.

有一天，当我们在旧金山散步时，特里斯坦对我说：“从外面看，事情很糟糕，但当你在里面时，事情看起来会更糟。”特里斯坦开始意识到：这不是你的怪你无法集中注意力。这是设计使然。

Your distraction is their fuel.

你的干扰就是他们的燃料。

After working intensively on the Gmail team, Tristan saw that when it came to questioning what they were doing to people’s attention, ‘the conversation was not happening’. He looked out across his friends now working in every part of Silicon Valley, and this grab-and-raid approach to our focus was being taken in almost all the companies they worked in.

在 Gmail 团队集中工作后，特里斯坦发现，当质疑他们做了什么引起人们注意的事情时，“对话并没有发生”。他观察了现在在硅谷各个地方工作的朋友们，他们工作过的几乎所有公司都在采取这种抢夺我们焦点的方法。

‘What started to really concern me over the years,’ he told me, ‘was

just watching my friends who had originally gotten into this business because they thought they could make the world better, [and now] were caught in this arms race to manipulate human nature.’

他告诉我，“这些年来我开始真正担心的是，我的朋友们最初进入这个行业是因为他们认为自己可以让世界变得更美好，[现在]却陷入了这场军备竞赛，操纵人性。”

To pluck one example out of dozens Tristan could offer, his friends Mike and Kevin had launched Instagram, and after a little while, ‘They added these filters, because it was a cool thing. So you could take a photo, and just have it look artistic instantly.’ It didn’t cross their minds, he’s sure, that it would start a race with Snapchat and others to see who could ‘provide better beautification filters’ – and that this would, in turn, change how people thought of their own bodies so much that today there’s a whole category of people who undergo surgery so they can look more like their filters.

为了从特里斯坦提供的数十个例子中挑选一个，他的朋友迈克和凯文推出了 Instagram，过了一会儿，“他们添加了这些过滤器，因为这是一件很酷的事情。这样你就可以拍一张照片，然后让它立即看起来很艺术。”他确信，他们并没有想到，它将与 Snapchat 和其他公司展开一场竞赛，看看谁可以“提供更好的美化滤镜”——而且这反过来会极大地改变人们对自己身体的看法，以至于今天有一类人接受手术，这样他们就可以看起来更像他们的过滤器。

He could see that his friends were setting in motion changes that were transforming the world in ways they couldn’t predict or control.

他可以看到他的朋友们正在推动变革，这些变革正在以他们无法预测或控制的方式改变世界。

‘The reason we have to be so careful about the way that we design technology,’ he said, is that ‘they squeeze, they squish, the entire world down into that medium – and out the other end comes a different world.’

他说，“我们必须对设计技术的方式如此谨慎，因为它们将整个世界挤压、压扁，压入这种介质中，而从另一端出来的是一个不同的世界。”

But here was Tristan, at the centre of the machine unleashing these transformations, and he could see that behind closed doors, the dials

in the control room were being set to ten.

但这是特里斯坦，在释放这些转变的机器的中心，他可以看到在紧闭的门后，控制室的刻度盘被设置为十。



After a few years at the heart of the Googleplex, Tristan couldn't take it any more, and he decided to leave. As a final gesture, he put together a slide show for the people he worked with, to appeal to them to think about these questions.

在 Googleplex 的中心工作了几年后，特里斯坦再也无法忍受，决定离开。作为最后的举动，他为与他一起工作的人制作了幻灯片，呼吁他们思考这些问题。

The first slide said simply: 'I'm concerned about how we're making the world more distracted.' He explained: 'Distraction matters to me, because time is all we have in life... Yet hours and hours can get mysteriously lost here.' He showed a picture of a Gmail inbox.

第一张幻灯片简单地说：“我担心我们如何让世界变得更加分心。”他解释道：“分心对我来说很重要，因为时间是我们生命中的全部……然而，时间和时间可能会在这里神秘地消失”他展示了一张 Gmail 收件箱的图片。

'And [on] feeds that suck huge chunks of time away here.' He showed a Facebook feed.

“还有那些占用大量时间的动态。”他展示了 Facebook 的动态。

He said he was worried that the company – and others like it – were inadvertently 'destroy[ing] our kids' ability to focus', pointing out that the average child between the ages of thirteen and seventeen in the US was sending one text message every six minutes they were awake.

他说，他担心该公司以及其他类似公司无意中“破坏了我们孩子的注意力”，并指出美国 13 岁到 17 岁之间的孩子平均会发送一条短信每六分钟他们就会醒一次。

People were, he warned, living 'on a treadmill of continuous

checking’.

他警告说，人们生活在“不断检查的跑步机上”。

He asked: We know that interruptions cause a deterioration in people’s ability to focus and think clearly – so why are we ramping up the interruptions? Why are we finding better and better ways to do it all the time? ‘Think about that,’ he told his colleagues.

他问道：我们知道干扰会导致人们集中注意力和清晰思考的能力下降，那么为什么我们要增加干扰呢？为什么我们一直在寻找越来越好的方法来做到这一点？“想一想，”他告诉同事们。

‘We should feel an enormous responsibility to get this right.’ All humans have natural vulnerabilities, and instead of exploiting those vulnerabilities – like a malign magician – Google should be respecting them. He suggested some modest changes as a place to start.

“我们应该感到肩负着巨大的责任来解决这个问题。”所有人类都有天生的弱点，谷歌不应该像邪恶的魔术师那样利用这些弱点，而应该尊重它们。他建议进行一些适度的改变作为起点。

Instead of notifying someone every time they have a new email, he suggested, we could notify them once a day, in a batch – so it’d be like getting a newspaper in the morning, instead of constantly following the rolling news.

他建议，我们可以每天批量通知他们一次，而不是每次收到新电子邮件时都通知他们，这样就像早上收到报纸一样，而不是持续关注滚动新闻。

Every time we prompt somebody to click over to a new photo their friend has posted, we could warn them – on the same screen – that the average person who clicks on a photo is pulled away for twenty minutes before they get back to their task.

每次我们提示某人点击他们的朋友发布的新照片时，我们都可以同一屏幕上警告他们，一般点击照片的人会被拉开二十分钟，然后才能回到他们的任务。

We could tell them: You think it’ll only take a second, but it won’t.

我们可以告诉他们：你认为只需要一秒钟，但事实并非如此。

He suggested giving users a chance to pause every time they click to do something potentially seriously distracting, to check: are you sure you want to do this? Do you know how much time it will take from you? ‘Humans make different decisions when we pause and consider,’ he said.

他建议让用户有机会在每次点击去做一些可能会严重分散注意力的事情时暂停一下，检查一下：你确定要这样做吗？你知道这需要你多少时间吗？“当我们停下来思考时，人类会做出不同的决定，”他说。

He was trying to give his colleagues a sense of the weight of the decisions they made every day: ‘We shape more than eleven billion interruptions to people’s lives *every day*. This is nuts!’ The people sitting around you in the Googleplex, he explained, control more than 50 percent of all the notifications on all the phones in the whole world.

他试图让同事们了解他们每天所做的决定的重要性：“我们每天对人们的生活造成超过 110 亿次干扰。”这太疯狂了！”他解释说，坐在 Googleplex 周围的人控制着全世界手机上 50% 以上的通知。

We are ‘creating an arms race that causes companies to find more reasons to steal people’s time’, and it ‘destroys our common silence and ability to think’. He asked: ‘Do we really know what we’re doing to people?’

我们正在“制造一场军备竞赛，导致公司找到更多理由来窃取人们的时间”，并且“破坏了我们共同的沉默和思考能力”。他问道：“我们真的知道我们对人们做了什么吗？”

This was an almost insanely bold thing to do. At the heart of the machine that was changing the world, here was a smart and talented but fairly junior engineer, still only twenty-nine years old, saying something that directly challenged the whole direction of the company.

这是一件近乎疯狂的大胆之举。在这台正在改变世界的机器的核心，有一位聪明而有才华但相当初级的工程师，年仅二十九岁，说出了一些直接挑战公司整体方向的言论。

It would be like a junior exec in 1975 standing up in front of the

whole of ExxonMobil and telling them that they were responsible for global warming by showing them images of the melting of the Arctic. Everyone in Silicon Valley was scrambling to get into and suck up to Google.

这就像 1975 年一位初级高管站在整个埃克森美孚公司面前，通过向他们展示北极融化的图像来告诉他们，他们对全球变暖负有责任。硅谷的每个人都在争相进入并讨好谷歌。

But here was Tristan, with the ability to stay at its heart for ever and make a lot of money, writing what seemed to be his own professional death certificate, because he believed somebody, somewhere, had to say something.

但这是特里斯坦，有能力永远留在它的核心并赚很多钱，写下似乎是他自己的职业死亡证明，因为他相信某个地方的某人必须说些什么。

He shared his slide show with his colleagues, and went home, depressed. Then something unexpected happened.

他与同事们分享了他的幻灯片，然后沮丧地回家了。然后意想不到的事情发生了。



With each hour that passed, more and more Google employees shared Tristan's slide show. The next day, he was inundated with messages from within the company enthusing about it. It turned out he had tapped into a latent mood.

随着时间的推移，越来越多的谷歌员工分享了特里斯坦的幻灯片。第二天，他就收到了来自公司内部对此充满热情的信息。原来他已经挖掘出了一种潜在的情绪。

Just because you design these products, it doesn't mean you are more insulated than anyone else from becoming hooked on them. The workers at the Googleplex could feel this tsunami of distractions hitting them too.

仅仅因为你设计了这些产品，并不意味着你比其他人更不会沉迷于它们。Googleplex 的工作人员也能感受到这种分心的海啸袭击了他们。

Many of them wanted to have a serious conversation about what they were doing to the world. People were drawn in particular to the question Tristan had put to them: ‘What if we designed [our products] to minimise stress and create calmer states of mind?’

他们中的许多人想认真讨论他们对世界所做的事情。人们特别被特里斯坦向他们提出的问题所吸引：“如果我们设计[我们的产品]能够最大程度地减少压力并创造更平静的心态会怎么样？”

There was some pushback too. A few of his colleagues said that every new technology brings with it a panic where people say it’ll trash the world – after all, Socrates said writing things down would ruin people’s memories. We were told that everything from the printed book to television would trash the minds of the young, but here we are, and the world survived.

也有一些阻力。他的一些同事说，每一项新技术都会带来恐慌，人们说它会毁掉世界——毕竟，苏格拉底说过，把东西写下来会毁掉人们的记忆。我们被告知，从印刷书籍到电视的一切都会破坏年轻人的思想，但我们来了，世界幸存下来。

Some others responded from a libertarian perspective, saying that what he was suggesting would invite government regulation, which they believed was contrary to the whole spirit of cyberspace.

另一些人则从自由主义的角度做出回应，称他的建议将引发政府监管，他们认为这违背了网络空间的整体精神。

Tristan’s presentation caused such a ruction within Google that he was asked to stay in a special new position, created just for him. They offered him the role of being Google’s first ‘design ethicist’. He was thrilled.

特里斯坦的演讲在谷歌内部引起了轩然大波，以至于他被要求保留一个专门为他设立的特殊新职位。他们为他提供了谷歌第一位“设计伦理学家”的角色。他很激动。

Here was a chance to think through some of the most challenging questions of our time, in a place where – if he could get people to listen – he could make an enormous difference. For the first time in a long time, he felt optimistic.

这是一个思考我们这个时代一些最具挑战性的问题的机会，如果他能让人们倾听，他就能带来巨大的改变。很长一段时间以来，他第一次感到乐观。

He thought his new appointment meant Google was serious about exploring these questions. He knew there was enthusiasm for it among his fellow workers, and he believed in the good faith of his bosses.

他认为他的新任命意味着谷歌正在认真探索这些问题。他知道同事们对此充满热情，并且相信老板的诚意。

He was assigned a desk, and – in effect – left to think. So he started to research the effects of many things. For example, he looked at the way Snapchat hooks teenagers. The app had an option called ‘Snapchat streaks’, where two friends – almost always teens – would check in with each other every day through the app.

他被分配了一张桌子，实际上是让他思考。于是他开始研究很多东西的影响。例如，他研究了 Snapchat 吸引青少年的方式。该应用程序有一个名为“Snapchat streaks”的选项，两个朋友（几乎都是青少年）每天都会通过该应用程序互相查看。

Every day they checked in, their streak got longer, so you would aim to build up a streak of 200, 300, 400 days, all on a brightly coloured display full of emojis. If you missed a single day, it would reset to zero.

他们每天签到，他们的连续签到时间就会更长，因此您的目标是建立 200 天、300 天、400 天的连续签到记录，所有这些都在充满表情符号的色彩鲜艳的显示屏上进行。如果您错过了一天，它将重置为零。

It was a perfect way to take the desire of teens for social connection and manipulate it to get them hooked. You came every day to extend your streak, and you stuck around to scroll, often for hours.

这是一种完美的方式，可以抓住青少年对社交联系的渴望，并操纵它让他们上瘾。你每天都会来延长你的连胜，并且你会坚持滚动，通常会持续几个小时。

But whenever he came up with a specific proposal for how Google’s own products could be less interrupting and presented it to people

above him, he was told, in effect: ‘This is hard, it’s confusing, and it’s often at odds with our bottom line.’ Tristan realised he was bumping up against a core contradiction.

但每当他提出关于谷歌自己的产品如何减少干扰的具体建议并将其提交给他的上级时，他实际上被告知：“这很难，令人困惑，而且常常与我们的底线相矛盾”特里斯坦意识到他遇到了一个核心矛盾。

The more people stared at their phones, the more money these companies made. Period. The people in Silicon Valley did not want to design gadgets and websites that would dissolve people’s attention spans. They’re not the Joker, trying to sow chaos and make us dumb. They spend a lot of their own time meditating and doing yoga.

人们盯着手机看的人越多，这些公司赚的钱就越多。时期。硅谷的人们不想设计会分散人们注意力的小工具和网站。他们不是小丑，试图制造混乱，让我们变得愚蠢。他们花很多时间冥想和做瑜伽。

They often ban their own kids from using the sites and gadgets they design, and send them instead to tech-free Montessori schools. But their business model can only succeed if they take steps to dominate the attention spans of the wider society. It’s not their goal, any more than ExxonMobil deliberately wants to melt the Arctic. But it’s an inescapable effect of their current business model.

他们经常禁止自己的孩子使用他们设计的网站和小工具，并将他们送到没有科技的蒙特梭利学校。但只有采取措施吸引更广泛社会的注意力，他们的商业模式才能成功。这不是他们的目标，就像埃克森美孚故意想要融化北极一样。但这是他们当前商业模式不可避免的影响。

When Tristan warned about these negative effects, most people inside the company sympathised and agreed. When he suggested alternatives, people changed the subject.

当特里斯坦警告这些负面影响时，公司内部的大多数人都表示同情并表示同意。当他提出替代方案时，人们改变了话题。

To give you a sense of the money involved: the personal wealth of Larry Page, one of the founders of Google, is \$102 billion; his colleague Sergey Brin is worth \$99 billion; and their colleague Eric Schmidt is worth \$20.7 billion. That’s separate from Google’s wealth

as a company, which as I write stands at \$1 trillion. These three men alone are worth roughly the same as the total combined wealth of every single person, building and bank account in the oil-rich country of Kuwait, and Google is worth roughly the entire wealth of the whole of Mexico or Indonesia.

让您了解一下所涉及的资金：Google 创始人之一拉里·佩奇 (Larry Page) 的个人财富为 1020 亿美元；他的同事谢尔盖·布林 (Sergey Brin) 身价 990 亿美元；他们的同事埃里克·施密特 (Eric Schmidt) 身价 207 亿美元。这与谷歌作为一家公司的财富是分开的，在我撰写本文时谷歌的财富为 1 万亿美元。仅这三个人的身价就大致相当于石油资源丰富的科威特每个人、建筑物和银行账户的总财富总和，而谷歌的身价大约相当于整个墨西哥或印度尼西亚的全部财富。

Telling them to distract people less was like telling an oil company not to drill for oil – they didn't want to hear it.

告诉他们少分散人们的注意力就像告诉石油公司不要开采石油一样——他们不想听。

'You don't even really get to make that ethical decision' to improve people's attention spans, Tristan realised, 'because your business model and your incentives are making that decision for you'. Years later, testifying before the US Senate, he explained: 'I failed because companies don't [currently] have the right incentive to change.'

特里斯坦意识到，“你甚至无法真正做出道德决定”来提高人们的注意力，“因为你的商业模式和激励措施正在为你做出这个决定”。多年后，在美国参议院作证时，他解释道：“我失败了，因为公司（目前）没有适当的动力去改变。”

Tristan was in the ethicist job for two years, and towards the end, as he told an audience later, 'I felt completely hopeless. There were literally days when I went to work and I would read Wikipedia all day and check my email and I would have no idea, once you see something as massive as the attention economy and its perverse incentives, how could a system this big ever change? I truly felt hopeless.

特里斯坦从事了两年的伦理学家工作，直到最后，正如他后来告诉观众的那样，“我感到完全绝望了。”确实有几天，当我去上班时，我会整天阅读维基百科并检查我的电子邮件，我不知道，一旦你看到像注意力

经济这样巨大的东西及其不正当的激励措施，这么大的系统如何能够改变？我真的感到绝望了。

I felt depressed.’ So, finally, he quit Google, and went out into a Silicon Valley where, as he put it to me, ‘everything is a race for attention’.

我感到沮丧。”所以，最后，他离开了谷歌，进入了硅谷，正如他对我所说，“一切都是为了吸引注意力”。

In that lonely time in Tristan’s life, he was about to team up with another person who felt depressed and lost – and who felt guilty about what he personally had done to you, me, and everyone we know.

在特里斯坦生命中那个孤独的时期，他即将与另一个感到沮丧和失落的人合作，这个人对他个人对你、我和我们认识的每个人所做的事情感到内疚。



You probably haven’t heard of Aza Raskin, but he has directly intervened in your life. He will, in fact, probably affect how you spend your time today. Aza grew up in the most elite sliver of Silicon Valley, at the height of its confidence that it was making the world better.

你可能没有听说过阿扎·拉斯金，但他直接介入了你的生活。事实上，他可能会影响你今天度过时间的方式。Aza 在硅谷最精英的地区长大，当时他对自己正在让世界变得更美好充满信心。

His dad was Jef Raskin, the man who invented the Apple Macintosh for Steve Jobs, and he built it around one core principle: that the user’s attention is sacred. The job of technology, Jef believed, was to lift people up and make it possible to achieve their higher goals. He taught his son: ‘What is technology for? Why do we even make technology?’

他的父亲是杰夫·拉斯金 (Jef Raskin)，他为史蒂夫·乔布斯 (Steve Jobs) 发明了苹果麦金塔 (Apple Macintosh)，他围绕一个核心原则构建了它：用户的注意力是神圣的。杰夫认为，技术的作用是提升人们的水平，使他们能够实现更高的目标。他教导儿子：‘技术有什么用？我们为什么还要制造技术？’

We make technology because it takes the parts of us that are most human and it extends them. That's what a paintbrush is. That's what a cello is. That's what language is. These are technologies that extend some part of us. Technology is not about making us superhuman. It's about making us extra-human.'

我们创造技术是因为它利用了我们最人性化的部分并扩展了它们。这就是画笔。这就是大提琴。这就是语言。这些技术扩展了我们的某些部分。技术并不是让我们成为超人。这是为了让我们变得非人类。”

Aza became a precocious young coder, and he gave his first talk about user interfaces when he was ten years old. By the time he was in his early twenties, he was at the forefront of designing some of the first internet browsers, and he was the creative lead on Firefox. As part of this work, he designed something that distinctly changed how the web works. It's called 'infinite scroll'. Older readers will remember that it used to be that the internet was divided into pages, and when you got to the bottom of one page, you had to decide to click a button to get to the next page. It was an active choice.

Aza 成为了一名早熟的年轻程序员，他在十岁时第一次谈论用户界面。当他二十岁出头时，他就处于设计一些最早的互联网浏览器的最前沿，并且是 Firefox 的创意领导者。作为这项工作的一部分，他设计了一些明显改变网络工作方式的东西。这就是所谓的“无限滚动”。老读者会记得，过去互联网被分为多个页面，当您到达一个页面的底部时，您必须决定单击一个按钮才能进入下一页。这是一个主动的选择。

It gave you a moment to pause and ask: Do I want to carry on looking at this? Aza designed the code that means you don't have to ask that question any more. Imagine you open Facebook. It downloads a chunk of status updates for you to read through. You scroll down through it, flicking your finger – and when you get to the bottom, it will automatically load another chunk for you to flick through.

这让你有时间停下来问：我想继续看这个吗？Aza 设计的代码意味着您不必再问这个问题。想象一下你打开 Facebook。它会下载大量状态更新供您阅读。你向下滚动它，轻弹手指——当你到达底部时，它会自动加载另一个块供你轻弹。

When you get to the bottom of that, it will automatically download

another chunk, and another, and another, forever. You can never exhaust it. It will scroll infinitely.

当你深入了解时，它会自动下载另一个块，然后再下载，然后永远下载。你永远无法耗尽它。它将无限滚动。

Aza was proud of the design. ‘At the outset, it looks like a really good invention,’ he told me. He believed he was making life easier for everyone. He had been taught that increased speed and efficiency of access were always advances.

阿扎对这个设计感到自豪。“乍一看，这看起来是一项非常好的发明，”他告诉我。他相信他正在让每个人的生活变得更轻松。他被告知，提高访问速度和效率始终是进步。

His invention quickly spread all over the internet. Today, all social media and lots of other sites use a version of infinite scroll. But then Aza watched as the people around him changed.

他的发明很快传遍了互联网。如今，所有社交媒体和许多其他网站都使用无限滚动的版本。但随后阿扎发现周围的人发生了变化。

They seemed to be unable to pull themselves away from their devices, flicking through and through and through, thanks in part to the code he had designed.

他们似乎无法将自己从设备上抽离出来，不断地翻阅、翻阅、翻阅，这在一定程度上要归功于他设计的代码。

He found himself infinitely scrolling through what he often realised afterwards was crap, and he wondered if he was making a good use of his life.

他发现自己无休止地浏览着后来他常常意识到是垃圾的东西，他想知道自己是否充分利用了自己的生活。

One day, when he was thirty-two, Aza sat down and did a calculation. At a conservative estimate, infinite scroll makes you spend 50 percent more of your time on sites like Twitter. (For many people, Aza believes, it's vastly more.) Sticking with this low-ball percentage, Aza wanted to know what it meant, in practice, if billions of people were spending 50 percent more on a string of social media sites. When

he was done, he stared at the sums. Every day, as a direct result of his invention, the combined total of 200,000 more total human lifetimes – every moment from birth to death – is now spent scrolling through a screen.

有一天，三十二岁的阿扎坐下来算了一笔账。据保守估计，无限滚动会让您在 Twitter 等网站上花费的时间增加 50%。（阿扎认为，对很多人来说，这个数字要高得多。）坚持这个较低的百分比，阿扎想知道，如果数十亿人在一系列社交媒体网站上的花费增加 50%，这实际上意味着什么。完成后，他盯着数字。作为他的发明的直接结果，每天，总共有 200,000 多人的生命周期——从出生到死亡的每时每刻——现在都花在滚动屏幕上。

These hours would otherwise have been spent on some other activity.

否则这些时间就会花在其他活动上。

When he described this to me, he still sounded a little stunned. That time is ‘just completely gone. It’s like their entire life – poof. That time, which could have been used for solving climate change, for spending time with their family, for strengthening social bonds.

当他向我描述这一点时，听起来还是有些惊讶。那个时代‘完全过去了’。这就像他们的一生——噗。那段时间本可以用来解决气候变化、与家人共度时光、加强社会联系。

For whatever is it that makes their life well-lived. It just...’ He trailed off. I pictured my young godson Adam and all his teenage friends, scrolling, scrolling, infinitely scrolling.

不管是什么让他们的生活过得很好。只是……”他的声音逐渐减弱。我想象着我年轻的教子亚当和他所有十几岁的朋友，滚动，滚动，无限滚动。

Aza told me he felt ‘sort of dirty’. He realised: ‘These things we do, they really can change the world. Then the question immediately follows: in what way did we change the world?’ He realised he thought making tech easier to use meant the world would get better.

阿扎告诉我，他感觉“有点肮脏”。他意识到：“我们所做的这些事情确实可以改变世界。”那么问题就随之而来：我们以什么方式改变了世界？”他意识到，他认为让技术更易于使用意味着世界会变得更好。

But he began to think that ‘one of my biggest learnings as a designer or technologist is – making something easy to use doesn’t mean it’s good for humanity’.

但他开始认为“作为一名设计师或技术专家，我最大的收获之一是——制造易于使用的东西并不意味着它对人类有好处”。

He thought about his father – who had since died – and his commitment to make tech that set people free to be better, and he wondered if he was living up to his dad’s vision. He began to ask if he and his generation in Silicon Valley were actually ‘mak[ing] technology that tears us, rips us, and breaks us’.

他想到了他已经去世的父亲，以及他致力于开发让人们自由变得更好的技术的承诺，他想知道自己是否实现了父亲的愿景。他开始问，他和他在硅谷的这一代人是否真的在“制造撕裂我们、撕裂我们、摧毁我们的技术”。

He carried on designing more things in the vein of infinite scroll, and getting more and more uncomfortable. ‘It was about the time that we were getting to be really successful at this that my stomach started to drop,’ he told me.

他继续以无限滚动的方式设计更多的东西，并且越来越不舒服。“就在我们真正取得成功的时候，我的胃开始下垂，”他告诉我。

He felt that he was seeing people become more unempathetic, angry and hostile as their social-media use went up. At the time, he was running an app he had designed named Post-Social, which was a social-media site designed to help people interact more in the real world, away from their devices.

他觉得随着社交媒体使用量的增加，人们变得更加冷漠、愤怒和敌对。当时，他正在运行自己设计的一款名为 Post-Social 的应用程序，这是一个社交媒体网站，旨在帮助人们在现实世界中远离设备进行更多互动。

He was trying to raise money for the next phase of its development, and all any investor wanted to know was: how much of people’s attention do you capture and run through your app? How often? How

many times a day? That's not what Aza wanted to be – a person who thought solely about how to drain away people's time. But 'you could see this gravity, pulling this product back to everything that we were trying to fight against.'

他试图为其下一阶段的开发筹集资金，而所有投资者都想知道的是：您的应用程序吸引并运行了多少人的注意力？多常？一天几次？这不是阿扎想要成为的人——一个只想着如何消磨人们时间的人。但“你可以看到这种引力，将这个产品拉回我们试图对抗的一切。”

The logic of the underlying system was being laid bare for Aza. Silicon Valley sells itself by articulating 'a big, lofty goal – connecting everyone in the world, or whatever it is.

底层系统的逻辑正在向阿扎揭示。硅谷通过阐明“一个伟大而崇高的目标——连接世界上的每个人，或者无论是什么”来推销自己。

But when you're actually doing the day-to-day work, it's about increasing user numbers.' What you are selling is your ability to grab and hold attention. When he tried to discuss this, he thwacked into raw denial.

但当你真正做日常工作时，重点是增加用户数量。”你推销的是你吸引和保持注意力的能力。当他试图讨论这个问题时，他猛然否认。

'Say you were baking bread,' he said to me, 'and you had this incredible bread, and you used this secret substance – and all of a sudden, you're making free bread for the world, and everyone's eating it.

“假设你正在烤面包，”他对我说，“你有这种令人难以置信的面包，并且你使用了这种秘密物质 - 突然之间，你正在为世界制作免费的面包，每个人都在吃它。

Then one of your scientists comes and says – by the way, we think it causes cancer, this secret substance. What do you do? You would almost certainly say – that can't be right. We need more research. Maybe it's something [else] that the people out there are doing.

然后你们的一位科学家过来说——顺便说一句，我们认为这种秘密物质会导致癌症。你做什么工作？你几乎肯定会说——那是不对的。我们需要更多的研究。也许这是人们正在做的事情。

Maybe there's some other factor.'

也许还有其他因素。

All throughout the industry, Aza kept meeting people who were going through similar crises. 'There were a number of dark nights of the soul that I personally witnessed,' he says.

在整个行业中，阿扎不断遇到经历过类似危机的人。“我亲眼目睹了许多灵魂的黑夜，”他说。

He watched as Silicon Valley's own inhabitants seemed to be hijacked by their own creations, and then tried to escape.

他看着硅谷自己的居民似乎被自己的造物劫持，然后试图逃跑。

When I met with several of these tech dissidents, it struck me how young they were – like they were almost children who had invented toys and watched their toys conquer the world. Everyone was scrambling to meditate in an attempt to resist the programs they had invented.

当我遇到这些科技异见人士时，我惊讶地发现他们是多么年轻——就像他们几乎是发明了玩具并看着他们的玩具征服世界的孩子一样。每个人都争先恐后地冥想，试图抵制他们发明的程序。

He realised 'one of the ironies is there are these incredibly popular workshops at Facebook and Google about mindfulness – about creating the mental space to make decisions non-reactively – and they are also the biggest perpetrators of non-mindfulness in the world'.

他意识到“具有讽刺意味的是，Facebook 和谷歌有这些非常受欢迎的关于正念的研讨会——关于创造心理空间以非反应性地做出决定——而他们也是世界上最大的非正念的肇事者”。



When Tristan and Aza started to speak out, they were ridiculed as wildly over-the-top Cassandras. But then, one by one, all over Silicon Valley, people who had built the world we now live in were beginning

to declare in public that they had similar feelings. For example, Sean Parker, one of the earliest investors in Facebook, told a public audience that the creators of the site had asked themselves from the start: ‘How do we consume as much of your time and conscious attention as possible?’ The techniques they used were ‘exactly the kind of thing that a hacker like myself would come up with, because you’re exploiting a vulnerability in human psychology ... The inventors, creators – it’s me, it’s Mark [Zuckerberg], it’s Kevin Systrom on Instagram, it’s all of these people – understood this consciously. And we did it anyway.’ He added: ‘God only knows what it’s doing to our children’s brains.’ Chamath Palihapitiya, who had been Facebook’s vice president of growth, explained in a speech that the effects are so negative that his own kids ‘aren’t allowed to use that shit’.

当特里斯坦和阿扎开始发声时，他们被嘲笑为过度夸张的卡桑德拉。但后来，在整个硅谷，那些建造了我们现在生活的世界的人们开始公开宣称他们有类似的感受。例如，Facebook 最早的投资者之一肖恩·帕克 (Sean Parker) 告诉公众，该网站的创建者从一开始就问自己：“我们如何尽可能多地消耗你们的时间和有意识的注意力？”他们使用的东西“正是像我这样的黑客会想出的东西，因为你正在利用人类心理的一个弱点……发明者、创造者——是我，是马克[扎克伯格]，是 Instagram 上的凯文·斯特罗姆，所有这些人都有意识地理解了这一点。无论如何，我们还是这么做了。”他补充道：“只有上帝才知道这对我们孩子的大脑造成了什么影响。”曾任 Facebook 增长副总裁的查马斯·帕里哈皮蒂亚 (Chamath Palihapitiya) 在一次演讲中解释说，这种影响非常负面，以至于他自己的孩子“不被允许使用那个狗屎。”

Tony Fadell, who co-invented the iPhone, said: ‘I wake up in cold sweats every so often thinking, what did we bring to the world?’ He worried that he had helped create ‘a nuclear bomb’ that can ‘blow up people’s brains and reprogram them’.

iPhone 的共同发明者托尼·法德尔 (Tony Fadell) 说：“我经常在冷汗中醒来，想，我们给世界带来了什么？”他担心自己帮助制造了可以“爆炸”的“核弹”人们的大脑并对其进行重新编程”。

Many Silicon Valley insiders predicted that it would only get worse. One of its most famous investors, Paul Graham, wrote: ‘Unless the forms of technological progress that produced these things are subject to different laws than technological progress in general, the world will get more addictive in the next forty years than it did in the last forty.’

许多硅谷内部人士预测情况只会变得更糟。其最著名的投资者之一保罗·格雷厄姆 (Paul Graham) 写道：“除非产生这些东西的技术进步形式受到与一般技术进步不同的法则的约束，否则世界将在未来四十年变得比 20 世纪更容易上瘾。”最后四十。”



One day, James Williams – the former Google strategist I met – addressed an audience of hundreds of leading tech designers and asked them a simple question. ‘How many of you want to live in the world you are designing?’ There was a silence in the room. People looked around them.

有一天，詹姆斯·威廉姆斯 (James Williams) ——我遇到的前谷歌战略家——向数百名领先的科技设计师发表了演讲，并向他们提出了一个简单的问题。“你们中有多少人想生活在你们设计的世界里？”房间里一片寂静。人们环顾四周。

Nobody put up their hand.

没有人举手。

Cause Six: The Rise of Technology That Can Track and Manipulate You (Part Two)

7

7 原因六：可以跟踪和操纵你的技术的兴起 (第二部分)

Tristan said to me that if you want to understand the deeper problems in the way our tech currently works – and why it is undermining our attention – a good place to start is with what seems like a simple question.

特里斯坦对我说，如果你想了解我们的技术当前工作方式中的更深层次问题 - 以及为什么它会削弱我们的注意力 - 一个好的起点是从一个看似简单的问题开始。

Imagine you are visiting New York and you want to know which of your friends are around in the city so you can hang out with them. You turn to Facebook.

想象一下，您正在访问纽约，并且想知道您的哪些朋友在城里，以便您可以与他们一起出去玩。你转向脸书。

The site will alert you about lots of things – a friend's birthday, a photo you've been tagged in, a terrorist attack – but it won't alert you to the physical proximity of somebody you might want to see in the real world.

该网站会提醒你很多事情——朋友的生日、你被标记的照片、恐怖袭击——但它不会提醒你现实世界中你可能想见的人的物理距离。

There's no button that says 'I want to meet up – who's nearby and free?' This isn't technologically tricky.

没有按钮显示“我想见面——谁在附近并且有空？”这在技术上并不困难。

It would be really easy for Facebook to be designed so that when you opened it, it told you which of your friends were close by and which of them would like to meet for a drink or dinner that week.

Facebook 的设计非常简单，当你打开它时，它会告诉你哪些朋友就在附近，以及他们中的哪些人想在本周见面喝一杯或吃顿饭。

The coding to do that is simple: Tristan and Aza and their friends could probably write it in a day. And it would be hugely popular. Ask any Facebook user – would you like Facebook to physically connect you to your friends more, instead of keeping you endlessly scrolling?

实现这一点的编码很简单：Tristan 和 Aza 以及他们的朋友可能可以在一天内完成它。而且它会非常受欢迎。询问任何 Facebook 用户 – 您是否希望 Facebook 能够让您与朋友有更多的物理联系，而不是让您无休止地滚动？

So – it's an easy tweak, and users would love it. Why doesn't it happen? Why won't the market provide it? To understand why, Tristan and his colleagues explained to me, you need to step back and understand more about the business model of Facebook and the other social-media companies. If you follow the trail from this simple question, you will see the root of many of the problems we are facing.

所以——这是一个简单的调整，用户会喜欢它。为什么它没有发生？为什么市场不提供呢？特里斯坦和他的同事向我解释说，要理解其中的原因，你需要退后一步，更多地了解 Facebook 和其他社交媒体公司的商业模式。如果你从这个简单的问题出发，你就会发现我们面临的许多问题的根源。

Facebook makes more money for every extra second you are staring through a screen at their site, and they lose money every time you put the screen down. They make this money in two ways. Until I started to

spend time in Silicon Valley, I had only naively thought about the first and the most obvious. Clearly – as I wrote in the last chapter – the more time you look at their sites, the more advertisements you see. Advertisers pay Facebook to get to you and your eyeballs.

你在 Facebook 网站上盯着屏幕的时间每多一秒，Facebook 就能赚更多的钱，而你每次放下屏幕，他们就会赔钱。他们通过两种方式赚钱。在我开始在硅谷度过一段时间之前，我只是天真地想到了第一个也是最明显的。显然——正如我在上一章中所写的——你浏览他们网站的时间越多，你看到的广告就越多。广告商向 Facebook 付费以吸引您和您的眼球。

But there's a second, more subtle reason why Facebook wants you to keep scrolling and desperately doesn't want you to log off. When I first heard about this reason, I scoffed a little – it sounded far-fetched.

但 Facebook 希望你继续滚动并且不希望你退出还有第二个更微妙的原因。当我第一次听到这个理由时，我有些嗤之以鼻——听起来很牵强。

But then I kept talking with people in San Francisco and Palo Alto, and every time I expressed scepticism about it, they looked at me like I was a maiden aunt in the 1850s who had just heard the details of sex for the first time. How, they asked, did you think it worked?

但后来我不断与旧金山和帕洛阿尔托的人们交谈，每次我对此表示怀疑时，他们看着我，就像我是一个 1850 年代第一次听到性细节的未婚阿姨一样。他们问，你认为这有效吗？

Every time you send a message or status update on Facebook, or Snapchat, or Twitter, and every time you search for something on Google, everything you say is being scanned and sorted and stored. These companies are building up a profile of you, to sell to advertisers who want to target you. For example, starting in 2014, if you used Gmail, Google's automated systems would scan through all your private correspondence to generate an 'advertising profile' exactly for you. If (say) you email your mother telling her you need to buy diapers, Gmail knows you have a baby, and it knows to target ads for baby products straight to you. If you use the word 'arthritis', it'll try to sell you arthritis treatments.

每次您在 Facebook、Snapchat 或 Twitter 上发送消息或状态更新，

以及每次在 Google 上搜索某些内容时，您所说的所有内容都会被扫描、排序和存储。这些公司正在建立您的个人资料，以将其出售给想要针对您的广告商。例如，从 2014 年开始，如果您使用 Gmail，Google 的自动化系统将扫描您所有的私人信件，为您生成一份“广告资料”。如果（比如说）您向母亲发送电子邮件，告诉她您需要购买尿布，Gmail 就会知道您有孩子，并且它会直接向您投放婴儿产品广告。如果您使用“关节炎”这个词，它会尝试向您推销关节炎治疗方法。

The process that had been predicted in Tristan's final class back in Stanford was beginning.

特里斯坦在斯坦福大学的最后一堂课上所预言的过程已经开始了。

Aza explained it to me by saying that I should imagine that ‘inside of Facebook’s servers, inside of Google’s servers, there is a little voodoo doll, [and it is] a model of you. It starts by not looking much like you. It’s sort of a generic model of a human.

阿扎向我解释说，我应该想象“在 Facebook 的服务器内部，在 Google 的服务器内部，有一个小巫毒娃娃，[它是]你的一个模型。”首先是长得不太像你。这是人类的通用模型。

But then they’re collecting your click trails [i.e., everything you click on], and your toenail clippings, and your hair droppings [i.e., everything you search for, every little detail of your life online]. They’re reassembling all that metadata you don’t really think is meaningful, so that doll looks more and more like you. [Then] when you show up on [for example] YouTube, they’re waking up that doll, and they’re testing out hundreds of thousands of videos against this doll, seeing what makes its arm twitch and move, so they know it’s effective, and then they serve that to you.’ It seemed like such a ghoulish image that I paused.

但随后他们会收集你的点击轨迹[即你点击的所有内容]、你的脚趾甲剪和你的头发粪便[即你搜索的所有内容、你在线生活的每一个小细节]。他们正在重新组装所有你认为没有意义的元数据，让娃娃看起来越来越像你。[然后]当你出现在[例如] YouTube 上时，他们会唤醒那个娃娃，并针对这个娃娃测试数十万个视频，看看是什么让它的手臂抽搐和移动，所以他们知道这是有效，然后他们就为你服务。”这看起来像一个令人毛骨悚然的形象，我停了下来。

He went on: ‘By the way – they have a doll like that for one in four human beings on earth.’

他接着说：“顺便说一句，地球上四分之一的人都有这样的娃娃。”

At the moment these voodoo dolls are sometimes crude and sometimes startlingly specific. We’ve all had one kind of experience of searching online for something.

目前，这些巫毒娃娃有时很粗糙，有时又非常具体。我们都有过一种在网上搜索东西的经历。

I recently tried to buy an exercise bike, and a month later, I am still endlessly being served advertisements for exercise bikes by Google and Facebook, until I want to scream, ‘I bought one already!’ But the systems are getting more sophisticated every year.

我最近尝试购买一辆健身车，一个月后，我仍然不断地收到 Google 和 Facebook 上的健身车广告，直到我想尖叫，“我已经买了一辆！”但是系统变得越来越复杂。年。

Aza told me: ‘It’s getting to be so good that whenever I give a presentation, I’ll ask the audience how many think Facebook is listening to their conversations, because there’s some ad that’s been served that’s just too accurate.

阿扎告诉我：“它变得如此之好，以至于每当我进行演示时，我都会询问观众有多少人认为 Facebook 正在监听他们的对话，因为有些广告太准确了。”

It’s about a specific thing they never mentioned before [but they happen to have talked about offline] to a friend the day before. Now, it’s generally one half to two-thirds of the audience that raises their hands. The truth is creepier.

这是关于他们之前从未向朋友提及过的一件具体事情（但他们恰好在前一天在线下谈论过）。现在，一般有二分之一到三分之二的观众举手。事实更令人毛骨悚然。

It’s not that they are listening and then they can do targeted ad serving. It’s that their model of you is so accurate that it’s making

predictions about you that you think are magic.’

这并不是说他们在倾听，然后就可以进行有针对性的广告投放。他们对你的模型是如此准确，以至于它对你做出了你认为很神奇的预测。

It was explained to me that whenever something is provided by a tech company for free, it's always to improve the voodoo doll. Why is Google Maps free? So the voodoo doll can include the details of where you go every day. Why are Amazon Echo and Google Nest Hubs sold for as cheap as \$30 (£22), far less than they cost to make? So they can gather more info; so the voodoo doll can consist not just of what you search for on a screen but what you say in your home.

有人向我解释说，每当科技公司免费提供某些东西时，总是为了改进巫毒娃娃。为什么 Google 地图是免费的？所以巫毒娃娃可以包含你每天去哪里的详细信息。为什么 Amazon Echo 和 Google Nest Hub 的售价低至 30 美元（22 英镑），远远低于它们的制造成本？这样他们就可以收集更多信息；因此，巫毒娃娃不仅可以包含您在屏幕上搜索的内容，还可以包含您在家里所说的内容。

This is the business model that built and sustains the sites on which we spend so much of our lives. The technical term for this system – coined by the brilliant Harvard Professor Shoshana Zuboff – is ‘surveillance capitalism’. Her work has made it possible for us to understand a lot of what is happening now. Of course, there have been increasingly sophisticated forms of advertising and marketing for over a hundred years – but this is a quantum leap forward. A billboard didn’t know what you googled at three in the morning last Thursday. A magazine ad didn’t have a detailed profile of everything you’ve ever said to your friends on Facebook and email.

这种商业模式建立并维持着我们大部分时间都在其中度过的网站。该系统的技术术语是由杰出的哈佛大学教授 Shoshana Zuboff 创造的，即“监视资本主义”。她的工作使我们能够了解现在正在发生的很多事情。当然，一百多年来，广告和营销的形式越来越复杂，但这是一个巨大的飞跃。广告牌不知道你上周日凌晨三点在谷歌上搜索了什么。杂志广告没有详细介绍您在 Facebook 和电子邮件上对朋友说过的一切。

Trying to give me a sense of this system, Aza said to me: ‘Imagine if I could predict all your actions in chess before you made them. It would be trivial for me to dominate you.

为了让我了解这个系统，阿扎对我说：“想象一下，如果我能在你下棋

之前预测你在国际象棋中的所有动作。对我来说，支配你是小事一桩。

That's what is happening on a human scale now.' Sometimes, a few of their specific practices have been banned by law. For example, in 2017 the European Union blocked some forms of tracking of internet users – they can't scan your Gmail any more in that territory – but the wider invasive machinery rolls on.

这就是现在人类正在发生的事情。”有时，他们的一些具体做法已被法律禁止。例如，2017 年，欧盟阻止了某些形式的互联网用户跟踪——他们无法再在该地区扫描你的 Gmail——但更广泛的入侵机制仍在继续。

Once you understand all this, you can see why there is no button that suggests you meet up with your friends and family away from the screen. Instead of getting us to maximise screen time, that would get us to maximise face-to-face time. Tristan said: 'If people used Facebook just to quickly get on, so they could find the amazing thing to do with their friends that night, and get off, how would that [affect] Facebook's stock price?

一旦您了解了这一切，您就会明白为什么没有按钮建议您在屏幕外与朋友和家人见面。这不会让我们最大化屏幕时间，而是让我们最大化面对面的时间。特里斯坦说：“如果人们使用 Facebook 只是为了快速上网，这样他们就可以在那天晚上找到与朋友一起做的令人惊奇的事情，然后就下车，这将如何影响 Facebook 的股价？

The average amount of time people spend on Facebook today is something like fifty minutes a day ... [But] if Facebook acted that way, people would spend barely a few minutes on there per day, in a much more fulfilling way.' Facebook's share price would collapse; it would be, for them, a catastrophe.

如今，人们在 Facebook 上花费的平均时间约为每天 50 分钟.....[但是]如果 Facebook 这样做的话，人们每天只需要花几分钟就可以在 Facebook 上度过，而且会更加充实。”Facebook 的股价会崩溃；对他们来说，这将是一场灾难。

This is why these sites are designed to be maximally distracting. They need to distract us, to make more money.

这就是为什么这些网站被设计成最大限度地分散注意力。他们需要分散我们的注意力，以赚更多的钱。

Tristan has seen, on the inside, how these business incentives work in practice. Imagine this, he said to me: an engineer proposes a tweak that improves people's attention, or gets them to spend more time with their friends.

特里斯坦在内部了解了这些商业激励措施如何在实践中发挥作用。想象一下，他对我说：一位工程师提出了一项调整，可以提高人们的注意力，或者让他们花更多的时间与朋友在一起。

“Then what happens is they will wake up two weeks to four weeks later, and there'll be some review on their dashboard looking at the metrics. [Their manager will] be saying, “Hey, why did time spent [on the site] go down about three weeks ago?”

“然后发生的事情是，他们会在两周到四个星期后醒来，他们的仪表板上会出现一些关于指标的审查。[他们的经理]会说：“嘿，为什么[在网站上]花费的时间大约三周前就减少了？”

Oh, it'll be [because] we added these features. Let's just roll back some of those features, to figure out how we get that number back up.”’ This isn't some conspiracy theory, any more than it's a conspiracy theory to explain that KFC wants you to eat fried chicken.

哦，这将是[因为]我们添加了这些功能。让我们回滚其中一些功能，看看如何恢复这个数字。”’这不是什么阴谋论，就像是解释肯德基想让你吃炸鸡的阴谋论一样。

It's simply an obvious result of the incentive structure that has been put in place and that we allow to continue. “Their business model,” he says, “is screen time, not life time.”

这只是已经制定并允许继续实施的激励结构的明显结果。“他们的商业模式，”他说，“是屏幕时间，而不是生活时间。”



It was at this point in learning Tristan's story – from him, his friends, his colleagues and his critics – that I realised something so simple that I am almost embarrassed to say it.

正是在从特里斯坦、他的朋友、他的同事和他的批评者那里了解特里斯坦的故事时，我意识到一些如此简单的事情，以至于我几乎不好意思说出来。

For years, I had blamed my deteriorating powers of attention simply on my own failings or on the existence of the smartphone itself as a technology. Most of the people I know do the same. We tell ourselves: The phone arrived, and it ravaged me.

多年来，我一直将自己注意力的下降归咎于自己的失败或智能手机本身作为一项技术的存在。我认识的大多数人都这样做。我们告诉自己：电话到了，它让我心碎。

I believed any smartphone would have done the same. But what Tristan was showing is that the truth is more complicated.

我相信任何智能手机都会做同样的事情。但特里斯坦所展示的是事实更为复杂。

The arrival of the smartphone would always have increased to some degree the number of distractions in life, to be sure, but a great deal of the damage to our attention spans is being caused by something more subtle.

诚然，智能手机的到来总会在某种程度上增加生活中干扰的数量，但对我们注意力持续时间的很大损害是由更微妙的事情造成的。

It's not the smartphone in and of itself; it is the way the apps on the smartphone and the sites on our laptops are designed.

它本身并不是智能手机，而是智能手机。这就是智能手机上的应用程序和笔记本电脑上的网站的设计方式。

Tristan taught me that the phones we have, and the programs that run on them, were deliberately designed by the smartest people in the world to maximally grab and maximally hold our attention. He wants us to understand that this design is not inevitable.

特里斯坦告诉我，我们拥有的手机以及手机上运行的程序是由世界上最聪明的人精心设计的，目的是最大限度地吸引和保持我们的注意力。他希望我们明白这种设计并不是不可避免的。

I had to really think this over, because, of all the things I learned from him, this seemed the most important.

我必须认真考虑一下，因为，在我从他那里学到的所有东西中，这似乎是最重要的。

The way our tech works now to corrode our attention was and remains a choice – by Silicon Valley, and by the wider society that lets them do it. Humans could have made a different choice then, and they can make a different choice now. You could have all this technology, Tristan told me, but not design it to be maximally distracting.

我们的技术现在腐蚀我们注意力的方式过去是、现在仍然是硅谷和允许他们这样做的更广泛社会的选择。人类当时可以做出不同的选择，现在也可以做出不同的选择。特里斯坦告诉我，你可以拥有所有这些技术，但不要将其设计得最大限度地分散注意力。

In fact, you could design it with the opposite goal: to maximally respect people's need for sustained attention, and to interrupt them as little as possible.

事实上，你可以以相反的目标来设计它：最大限度地尊重人们持续关注的需求，并尽可能少地打扰他们。

You could design the technology not so that it pulls people away from their deeper and more meaningful goals, but so that it helps them to achieve them.

你设计的技术不是为了让人们远离更深层、更有意义的目标，而是为了帮助他们实现这些目标。

This was shocking to me. It's not just the phone: it's the way the phone is currently designed. It's not just the internet: it's the way the internet is currently designed – and the incentives for the people designing it.

这让我很震惊。这不仅仅是手机的问题：手机目前的设计方式也是如此。这不仅仅是互联网：这是互联网目前的设计方式，以及设计者的激励措施。

You could keep your phone and your laptop, and you could keep your social-media accounts – and have much better attention, if they were designed around a different set of incentives.

你可以保留你的手机和笔记本电脑，你也可以保留你的社交媒体帐户——如果它们是围绕一套不同的激励措施设计的，那么你可以得到更好的关注。

Once you see it in this different way, Tristan came to believe, it opens up a very different path forward, and the beginnings of a way out of our crisis.

特里斯坦开始相信，一旦你以这种不同的方式看待它，它就会开辟一条截然不同的前进道路，并开始摆脱我们的危机。

If the existence of the phone and the internet is the sole driver of this problem, we're trapped and in deep trouble – because as a society, we're not going to discard our tech.

如果电话和互联网的存在是这个问题的唯一驱动因素，那么我们就陷入了困境，陷入了深深的麻烦——因为作为一个社会，我们不会放弃我们的技术。

But if it's the current design of the phones and the internet and the sites we run on them that is driving a lot of the problem, and there's a very different way they could work, that would put us all in a very different position.

但如果是手机和互联网以及我们在其上运行的网站的当前设计造成了很多问题，并且它们的工作方式非常不同，那将使我们所有人处于非常不同的境地。

After you've adjusted your perspective in this way, seeing this as a debate between whether you are pro-tech or anti-tech is bogus and lets the people who stole your attention off the hook. The real debate is: *what* tech, designed for *what* purposes, in *whose* interests?

当你以这种方式调整你的观点之后，将其视为支持科技还是反科技的争论是虚假的，并且会让那些窃取你注意力的人摆脱困境。真正的争论是：什么技术、设计用于什么目的、为了谁的利益？

But when Tristan and Aza said that these sites are designed to be as distracting as possible, I still didn't really understand how. It seemed like a big claim. To grasp it, I had to first learn something else embarrassingly basic.

但当特里斯坦和阿扎说这些网站的设计目的是尽可能分散注意力时，我仍然不太明白是怎么做的。这似乎是一个很大的主张。为了掌握它，我必须首先学习一些其他令人尴尬的基础知识。

When you open your Facebook feed, you see a whirr of things for you to look at – your friends, their photos, some news stories. When I first joined Facebook back in 2008, I naively thought that these things appeared simply in the order in which my friends had posted them.

当您打开 Facebook 动态时，您会看到一堆可供您查看的内容 – 您的朋友、他们的照片、一些新闻报道。当我 2008 年第一次加入 Facebook 时，我天真地认为这些东西只是按照我朋友发布的顺序出现的。

I'm seeing my friend Rob's photo because he just put it up; then my auntie's status update comes next because she posted it before him. Or maybe, I thought, they were selected randomly.

我看到我朋友罗布的照片是因为他刚刚把它贴出来了；接下来是我阿姨的状态更新，因为她在他之前发布了它。或者，我想，他们可能是随机选择的。

In fact, I learned over the years – as we all became more informed about these questions – that what you see is selected for you according to an algorithm.

事实上，多年来，随着我们对这些问题的了解越来越多，我了解到，您所看到的内容是根据算法为您选择的。

When Facebook (and all the others) decide what you see in your news feed, there are many thousands of things they could show you. So they have written a piece of code to automatically decide what you will see. There are all sorts of algorithms they could use – ways they could decide what you should see, and the order in which you should see them.

当 Facebook（以及所有其他公司）决定您在新闻源中看到的内容时，他们可以向您展示成千上万的内容。所以他们写了一段代码来自动

决定你会看到什么。他们可以使用各种各样的算法——他们可以决定你应该看到什么，以及你应该看到它们的顺序。

They could have an algorithm designed to show you things that make you feel happy. They could have an algorithm designed to show you things that make you feel sad. They could have an algorithm to show you things that your friends are talking about most.

他们可以有一个算法来向你展示让你感到快乐的事情。他们可以有一个算法来向你展示让你感到悲伤的事情。他们可以有一个算法来向您展示您的朋友最常谈论的事情。

The list of potential algorithms is long.

潜在算法的列表很长。

The algorithm they actually use varies all the time, but it has one key driving principle that is consistent. It shows you things that will keep you looking at your screen. That's it. Remember: the more time you look, the more money they make.

他们实际使用的算法一直在变化，但它有一个一致的关键驱动原理。它向您展示的内容会让您一直盯着屏幕。就是这样。请记住：您看的时间越多，他们赚的钱就越多。

So the algorithm is always weighted towards figuring out what will keep you looking, and pumping more and more of that on to your screen to keep you from putting down your phone. It is designed to distract.

因此，该算法始终侧重于找出让您持续观看的内容，并将越来越多的内容显示在您的屏幕上，以防止您放下手机。它旨在分散注意力。

But, Tristan was learning, that leads – quite unexpectedly, and without anyone intending it to – to some other changes, which have turned out to be incredibly consequential.

但是，特里斯坦正在学习，这会导致——完全出乎意料，而且没有任何人有意为之——导致一些其他变化，结果证明这些变化产生了令人难以置信的后果。

Imagine two Facebook feeds. One is full of updates, news and

videos that make you feel calm and happy. The other is full of updates, news and videos that make you feel angry and outraged. Which one does the algorithm select?

想象一下两个 Facebook feed。其中充满了更新、新闻和视频，让您感到平静和快乐。另一个充满了让你感到愤怒和愤怒的更新、新闻和视频。算法选择哪一个？

The algorithm is neutral about the question of whether it wants you to be calm or angry. That's not its concern. It only cares about one thing: will you keep scrolling? Unfortunately, there's a quirk of human behaviour.

该算法对于它希望你保持冷静还是愤怒的问题保持中立。这不是它关心的问题。它只关心一件事：你会继续滚动吗？不幸的是，人类行为有一个怪癖。

On average, we will stare at something negative and outrageous for a lot longer than we will stare at something positive and calm.

平均而言，我们盯着消极和令人发指的事物的时间比盯着积极和平静的事物的时间要长得多。

You will stare at a car crash longer than you will stare at a person handing out flowers by the side of the road, even though the flowers will give you a lot more pleasure than the mangled bodies in a crash.

你盯着车祸的时间比盯着路边送花的人的时间还要长，尽管鲜花比车祸中残破的尸体给你带来更多的快乐。

Scientists have been proving this effect in different contexts for a long time – if they showed you a photo of a crowd, and some of the people in it were happy, and some angry, you would instinctively pick out the angry faces first.

长期以来，科学家们一直在不同的背景下证明这种效应——如果他们向你展示一张人群的照片，其中有些人很高兴，有些人很生气，你会本能地首先认出愤怒的面孔。

Even ten-week-old babies respond differently to angry faces. This has

been known about in psychology for years and is based on a broad body of evidence. It's called 'negativity bias'.

即使是十周大的婴儿对愤怒的面孔也会有不同的反应。这在心理学中已为人所知多年，并且基于广泛的证据。这就是所谓的“消极偏见”。

There is growing evidence that this natural human quirk has a huge effect online. On YouTube, what are the words that you should put into the title of your video, if you want to get picked up by the algorithm? They are – according to the best site monitoring YouTube trends – words such as 'hates, obliterates, slams, destroys'. A major study at New York University found that for every word of moral outrage you add to a tweet, your retweet rate will go up by 20 percent on average, and the words that increased your retweet rate most were 'attack', 'bad' and 'blame'.

越来越多的证据表明，人类的这种自然怪癖在网上有着巨大的影响。在 YouTube 上，如果您想被算法收录，您应该在视频标题中添加哪些词？根据监控 YouTube 趋势的最佳网站的说法，它们是“仇恨、抹杀、猛烈抨击、破坏”等词语。纽约大学的一项重大研究发现，你在推文中添加每一个道德义愤词，你的转发率平均就会上升 20%，而增加转发率最多的词是“攻击”、“坏”和“责备”。

A study by the Pew Research Center found that if you fill your Facebook posts with 'indignant disagreement', you'll double your likes and shares.

皮尤研究中心的一项研究发现，如果你在 Facebook 帖子中表达“愤怒的不同意见”，你的点赞数和分享量就会增加一倍。

So an algorithm that prioritises keeping you glued to the screen will – unintentionally but inevitably – prioritise outraging and angering you. If it's more enraging, it's more engaging.

因此，优先考虑让你紧盯着屏幕的算法会——无意中但不可避免地——优先考虑激怒你。如果它更令人愤怒，那就更有吸引力。

If enough people are spending enough of their time being angered, that starts to change the culture. As Tristan told me, it 'turns hate into a habit'. You can see this seeping into the bones of our society.

如果有足够多的人花足够多的时间被激怒，文化就会开始改变。正如

特里斯坦告诉我的，它“把仇恨变成了一种习惯”。你可以看到这已经渗透到社会骨髓里。

When I was a teenager, there was a horrific crime in Britain, where two ten-year-old children murdered a toddler named Jamie Bulger.

当我十几岁的时候，英国发生了一起可怕的犯罪事件，两个十岁的孩子谋杀了一个名叫杰米·巴尔杰的幼儿。

The Conservative prime minister at the time, John Major, responded by publicly saying that he believed we need ‘to condemn a little more, and understand a little less’.

时任保守党首相约翰·梅杰公开回应称，他认为我们需要“多谴责一点，少理解一点”。

I remembered thinking then, at the age of fourteen, that this was surely wrong – that it’s always better to understand why people do things, even (perhaps especially) the most heinous acts.

我记得当时我十四岁的时候就想，这肯定是错误的——理解人们为什么做事总是更好，即使是（也许尤其是）最令人发指的行为。

But today, this attitude – condemn more, understand less – has become the default response of almost everyone, from the right to the left, as we spend our lives dancing to the tune of algorithms that reward fury and penalise mercy.

但如今，这种态度——多谴责，少理解——已经成为几乎每个人的默认反应，从右派到左派，我们一生都在随着奖励愤怒、惩罚仁慈的算法的节奏起舞。



In 2015 a researcher named Motahhare Eslami, as part of a team at the University of Illinois, took a group of ordinary Facebook users and explained to them how the Facebook algorithm works. She talked them through how it selects what they see.

2015 年，伊利诺伊大学团队中一位名叫 Motahhare Eslami 的研究人员带领一群普通 Facebook 用户向他们解释了 Facebook 算法的工作原

理。她向他们讲述了它如何选择他们所看到的内容。

She discovered that 62 percent of them didn't know their feeds were filtered at all, and they were astonished to learn about the algorithm's existence. One person in the study compared it to the moment in the film *The Matrix*, when the central character, Neo, discovers he is living in a computer simulation.

她发现，其中 62% 的人根本不知道他们的提要已被过滤，他们对算法的存在感到惊讶。研究中的一个人将其与电影《黑客帝国》中的那一刻进行了比较，当时的主角尼奥发现自己生活在计算机模拟中。

Since I started work on this book in 2018, awareness of these questions has been growing rapidly, not least thanks to Tristan's work – but I called several of my relatives and asked them if they knew what an algorithm was. None of them – including the teenagers – did.

自从我 2018 年开始写这本书以来，人们对这些问题的认识一直在迅速提高，这尤其要归功于特里斯坦的工作——但我打电话给我的几位亲戚，询问他们是否知道算法是什么。他们——包括青少年——都没有这样做。

I asked my neighbours. They looked at me blankly. It's easy to assume most people know about this, but I don't think it's true. And even if you know all about it, that alone gives you no protection at all.

我问我的邻居。他们茫然地看着我。很容易假设大多数人都知道这一点，但我认为这不是真的。即使您了解所有情况，仅凭这一点也无法为您提供任何保护。



When I pieced together the evidence I'd learned, I could see that – when I broke it down – the people I interviewed had presented evidence for six distinct ways in which this machinery, as it currently operates, is harming our attention.

当我把学到的证据拼凑起来时，我可以看到——当我把它分解时——我采访的人提出了证据，证明这个机器目前的运作方式正在以六种不同的方式损害我们的注意力。

(I will come to the scientists who dispute these arguments in

Chapter Eight: as you read this, remember that some of it is controversial.)

(我将在第八章中讨论那些对这些论点提出异议的科学家：当你阅读本文时，请记住其中一些是有争议的。)

First, these sites and apps are designed to train our minds to crave frequent rewards. They make us hunger for hearts and likes. When I was deprived of them in Provincetown, I felt bereft, and had to go through a painful withdrawal.

首先，这些网站和应用程序旨在训练我们的大脑渴望频繁的奖励。他们让我们渴望得到心灵和喜欢。当我在普罗温斯敦被剥夺了这些权利时，我感到失落，不得不经历痛苦的退缩。

Once you have been conditioned to need these reinforcements, Tristan told one interviewer, ‘It’s very hard to be with reality, the physical world, the built world – because it doesn’t offer as frequent and as immediate rewards as this thing does.’ This craving will drive you to pick up your phone more than you would if you had never been plugged into this system.

一旦你习惯了需要这些强化，特里斯坦告诉一位采访者，“与现实、物质世界、建筑世界相处是非常困难的——因为它不能像这件事一样提供频繁和直接的回报。”这种渴望会驱使你比从未接触过该系统时更频繁地拿起手机。

You’ll break away from your work and your relationships to seek a sweet, sweet hit of retweets.

你会摆脱工作和人际关系，去寻找甜蜜的转发。

Second, these sites push you to switch tasks more frequently than you normally would – to pick up your phone, or click over to Facebook on your laptop. When you do this, all the costs to your attention caused by switching – as I discussed in

Chapter One – kick in. The evidence there shows this is as bad for the quality of your thinking as getting drunk or stoned.

其次，这些网站会促使您比平常更频繁地切换任务——拿起手机，或者在笔记本电脑上点击 Facebook。当你这样做时，由于转换而引起的所有注意力消耗（正如我在第一章中讨论的那样）就会开始发挥作用。那里的证据表明，这对你的思维质量来说就像喝醉或吸毒一样糟糕。

Third, these sites learn – as Tristan put it – how to ‘frack’ you. These sites get to know what makes you tick, in very specific ways – they learn what you like to look at, what excites you, what angers you, what enrages you.

第三，正如特里斯坦所说，这些网站学习如何“打击”你。这些网站以非常具体的方式了解是什么让你兴奋——它们了解你喜欢看什么，什么让你兴奋，什么让你生气，什么激怒了你。

They learn your personal triggers – what, specifically, will distract you. This means that they can drill into your attention. Whenever you are tempted to put your phone down, the site keeps drip-feeding you the kind of material that it has learned, from your past behaviour, keeps you scrolling. Older technologies – like the printed page, or the television – can’t target you in this way. Social media knows exactly where to drill. It learns your most distractible spots and targets them.

他们了解你的个人触发因素——具体来说，什么会分散你的注意力。这意味着他们可以深入你的注意力。每当你想放下手机时，该网站就会不断地向你提供它从你过去的行为中学到的材料，让你继续滚动。较旧的技术（例如印刷版或电视）无法以这种方式瞄准您。社交媒体确切地知道该在哪里钻探。它会了解您最容易分心的地方并针对它们。

Fourth, because of the way the algorithms work, these sites make you angry a lot of the time. Scientists have been proving in experiments for years that anger itself screws with your ability to pay attention.

第四，由于算法的工作方式，这些网站很多时候会让你生气。科学家们多年来一直在实验中证明，愤怒本身会影响你的注意力。

They have discovered that if I make you angry, you will pay less attention to the quality of arguments around you, and you will show

‘decreased depth of processing’ – that is, you will think in a shallower, less attentive way.

他们发现，如果我让你生气，你就会不太注意周围争论的质量，并且会表现出“处理深度下降”——也就是说，你会以一种更肤浅、更不专心的方式思考。

We’ve all had that feeling – you start prickling with rage, and your ability to properly listen goes out the window. The business models of these sites are jacking up our anger every day. Remember the words their algorithms promote – attack, bad, blame.

我们都有过这样的感觉——你开始被愤怒刺痛，而你正确倾听的能力也消失了。这些网站的商业模式每天都在加剧我们的愤怒。记住他们的算法提倡的词语——攻击、坏、责备。

Fifth, in addition to making you angry, these sites make you feel that you are surrounded by other people’s anger. This can trigger a different psychological response in you. As Dr Nadine Harris, the Surgeon General of California, who you’ll meet later in this book, explained to me: Imagine that one day you are attacked by a bear. You will stop paying attention to your normal concerns – what you’re going to eat tonight, or how you will pay the rent.

第五，这些网站除了让你生气之外，还让你感觉自己被其他人的愤怒所包围。这会引发你不同的心理反应。正如加利福尼亚州卫生局局长纳丁·哈里斯博士（您将在本书后面见到的她）向我解释的那样：想象一下，有一天您遭到一只熊的袭击。你将不再关注你平常关心的事情——今晚要吃什么，或者如何支付房租。

You become vigilant. Your attention flips to scanning for unexpected dangers all around you. For days and weeks afterwards, you will find it harder to focus on more everyday concerns. This isn’t limited to bears.

你变得警惕。你的注意力转向扫描周围意想不到的危险。之后的几天或几周，您会发现很难专注于更多的日常事务。这不仅限于熊。

These sites make you feel that you are in an environment full of anger and hostility, so you become more vigilant – a situation where more of your attention shifts to searching for dangers, and less and less is

available for slower forms of focus like reading a book or playing with your kids.

这些网站让你感觉自己处于一个充满愤怒和敌意的环境中，因此你变得更加警惕——在这种情况下，你的注意力更多地转移到寻找危险上，而越来越少的注意力可以用于较慢的注意力形式，比如阅读书籍。读书或和孩子一起玩。

Sixth, these sites set society on fire. This is the most complex form of harm to our attention, with several stages, and I think probably the most harmful. Let's go through it slowly.

第六，这些网站引起了社会的关注。这是对我们注意力伤害最复杂的形式，有几个阶段，我认为可能是最有危害的。让我们慢慢过一遍。



We don't just pay attention as individuals: we pay attention together, as a society. Here's an example. In the 1970s, scientists discovered that all over the world, people were using hairsprays that contained a group of chemicals named CFCs. These chemicals were then entering the atmosphere and having an unintended but disastrous effect – they were damaging the ozone layer, a crucial part of the atmosphere that protects us from the sun's rays. Those scientists warned that, over time, this could pose a serious threat to life on earth. Ordinary people absorbed this information and saw that it was true.

我们不只是作为个人来关注：我们作为一个社会来共同关注。这是一个例子。20 世纪 70 年代，科学家发现世界各地的人们使用的发胶中含有一组名为 CFC 的化学物质。这些化学物质随后进入大气层，产生了意想不到的灾难性影响——它们破坏了臭氧层，而臭氧层是大气层的重要组成部分，可以保护我们免受阳光照射。这些科学家警告说，随着时间的推移，这可能对地球上的生命构成严重威胁。普通人吸收了这些信息并发现这是真的。

Then activist groups – made up of ordinary citizens – formed, and demanded a ban. These activists persuaded their fellow citizens that this was urgent and made it into a big political issue.

随后，由普通公民组成的激进团体成立，并要求实施禁令。这些活动人士让他们的同胞相信这是紧急的，并将其变成了一个重大的政治问

题。

This put pressure on politicians and that pressure was sustained until those politicians banned CFCs entirely.

这给政治家带来了压力，并且这种压力一直持续到这些政治家完全禁止氟氯化碳为止。

At every stage, averting this risk to our species required us to be able to pay attention as a society – to absorb the science; to distinguish it from falsehood; to band together to demand action; and to pressure our politicians until they act.

在每个阶段，要避免我们人类面临的这种风险，就需要我们作为一个社会能够予以关注——吸收科学知识；将其与虚假区别开来；联合起来要求采取行动；并向我们的政客施加压力，直到他们采取行动。

But there is evidence that these sites are now severely harming our ability to come together as a society to identify our problems and to find solutions in ways like this. They are damaging not just your attention as an individual, but our collective attention.

但有证据表明，这些网站现在严重损害了我们作为一个社会团结起来识别问题并以此类方式寻找解决问题的能力。它们不仅损害了您个人的注意力，而且损害了我们的集体注意力。

At the moment false claims spread on social media far faster than the truth, because of the algorithms that spread outraging material faster and further. A study by the Massachusetts Institute of Technology found that fake news travels six times faster on Twitter than real news, and during the 2016 US presidential elections, flat-out falsehoods on Facebook outperformed the top stories at nineteen mainstream news sites put together.

目前，虚假言论在社交媒体上的传播速度远远快于真相，因为算法可以更快、更广泛地传播令人愤怒的材料。麻省理工学院的一项研究发现，假新闻在 Twitter 上的传播速度是真实新闻的六倍，而且在 2016 年美国总统选举期间，Facebook 上的彻头彻尾的虚假新闻比 19 个主流新闻网站的头条新闻加起来还要多。

As a result, we are being pushed all the time to pay attention to

nonsense – things that just aren't so. If the ozone layer was threatened today, the scientists warning about it would find themselves being shouted down by bigoted viral stories claiming the threat was all invented by the billionaire George Soros, or that there's no such thing as the ozone layer anyway, or that the holes were really being made by Jewish space lasers.

结果，我们一直被迫去关注那些无意义的事情——但事实并非如此。如果今天臭氧层受到威胁，科学家们会发现自己被那些偏执的病毒式故事所斥责，这些故事声称这种威胁都是亿万富翁乔治·索罗斯发明的，或者根本不存在臭氧层这样的东西，或者臭氧层根本不存在。孔确实是由犹太太空激光器打出来的。

If we are lost in lies, and constantly riled up to be angry with our fellow citizens, this sets off a chain reaction. It means we can't understand what is really going on. In those circumstances, we can't solve our collective challenges.

如果我们迷失在谎言中，并且不断地对我们的同胞感到愤怒，就会引发连锁反应。这意味着我们无法理解到底发生了什么。在这种情况下，我们无法解决我们的集体挑战。

This means our wider problems will get worse. As a result, the society won't just *feel* more dangerous – it will actually be more dangerous. Things will start to break down. And as real danger rises, we will become more and more vigilant.

这意味着我们更广泛的问题将会变得更糟。结果，社会不仅会感觉更危险，而且实际上会更危险。事情将开始崩溃。当真正的危险出现时，我们会变得越来越警惕。

One day, Tristan was shown how this dynamic works when he was approached by a man named Guillaume Chaslot, who had been an engineer designing and administering the algorithm that picks out the videos that are recommended to you on YouTube when you watch a video there. Guillaume wanted to tell him what was happening behind closed doors. Just like Facebook, YouTube makes more money the longer you watch.

有一天，一位名叫纪尧姆·查斯洛特 (Guillaume Chaslot) 的人找到特里斯坦，向他展示了这种动态是如何运作的。纪尧姆·查斯洛特曾是一名工程师，负责设计和管理算法，当你在 YouTube 上观看视频时，该算法会挑选出向你推荐的视频。纪尧姆想告诉他关起门来发生的事情。就

像 Facebook 一样，您观看的时间越长，YouTube 赚的钱就越多。

That's why they designed it so that when you stop watching one video, it automatically recommends and plays another one for you. How are those videos selected?

这就是为什么他们设计它的原因是，当您停止观看一个视频时，它会自动为您推荐并播放另一个视频。这些视频是如何选择的？

YouTube also has an algorithm – and it too has figured that that you'll keep watching longer if you see things that are outrageous, shocking and extreme. Guillaume had seen how it works, with all the data YouTube keeps secret – and he saw what it meant in practice.

YouTube 也有一个算法——它也认为，如果你看到令人震惊、令人震惊和极端的事情，你会继续观看更长时间。Guillaume 已经了解了它的工作原理，YouTube 对所有数据都保密，而且他也了解了它在实践中意味着什么。

If you watched a factual video about the Holocaust, it would recommend several more videos, each one getting more extreme, and within a chain of five or so videos, it would usually end up automatically playing a video denying the Holocaust happened.

如果你观看了一个有关大屠杀的事实视频，它会推荐更多几个视频，每个视频都变得更加极端，并且在五个左右的视频链中，它通常会自动播放一个否认大屠杀发生的视频。

If you watched a normal video about 9/11, it would often recommend a '9/11 truther' video in a similar way. This isn't because the algorithm (or anyone at YouTube) is a Holocaust denier or 9/11 truther.

如果您观看了有关 9/11 的普通视频，它通常会以类似的方式推荐“9/11 真相”视频。这并不是因为该算法（或 YouTube 上的任何人）是大屠杀否认者或 9/11 真相者。

It was simply selecting whatever would most shock and compel people to watch longer. Tristan started to look into this, and concluded: 'No matter where you start, you end up more crazy.'

它只是选择最令人震惊并迫使人们观看更长时间的内容。特里斯坦开始对此进行调查，并得出结论：“无论你从哪里开始，你最终都会变得更加疯狂。”

It turned out, as Guillaume leaked to Tristan, that YouTube had recommended videos by Alex Jones and his website InfoWars 15 billion times. Jones is a vicious conspiracy theorist who has claimed that the 2012 Sandy Hook massacre was faked, and that the grieving parents are liars whose children had never even existed. As a result, some of those parents were inundated with death threats and had to flee their homes.

事实证明，正如纪尧姆向特里斯坦透露的那样，YouTube 已推荐亚历克斯·琼斯及其网站 InfoWars 的视频 150 亿次。琼斯是一位恶毒的阴谋论者，他声称 2012 年桑迪胡克大屠杀是伪造的，悲伤的父母是骗子，他们的孩子根本不存在。结果，其中一些父母受到死亡威胁，不得不逃离家园。

When they sued him, he admitted in court that the massacre was real, and said he had been suffering from ‘a form of psychosis’ when he denied it. This is just one of many insane claims he has made. Tristan has said: ‘Let’s compare that – what is the aggregate traffic of the *New York Times*, the *Washington Post*, the *Guardian*? All that together is not close to fifteen billion views.’

当他们起诉他时，他在法庭上承认大屠杀是真实的，并在否认时表示自己患有“某种形式的精神病”。这只是他提出的众多疯狂主张之一。特里斯坦说：“我们来比较一下——《纽约时报》、《华盛顿邮报》和《卫报》的总流量是多少？所有这些加起来还不到 150 亿次观看次数。

The average young person is soaking up filth like this day after day. Do those feelings of anger go away when they put down their phone? The evidence suggests that for lots of people, they don’t.

一般的年轻人就这样日复一日地吸收着污秽。当他们放下手机后，那些愤怒的感觉就会消失吗？证据表明，对于很多人来说，他们并不这样做。

A major study asked white nationalists how they became radicalised, and a majority named the internet – with YouTube as the site that most influenced them. A separate study of far-right people on Twitter

found that YouTube was by far the website they turned to the most. ‘Just watching YouTube radicalises people,’ Tristan explained. Companies like YouTube want us to think ‘we have a few bad apples’, he explained to the journalist Decca Aitkenhead, but they don’t want us to ask: ‘Do we have a system that is systematically, as you turn the crank every day, pumping out more radicalisation? We’re growing bad apples. We’re a bad-apple factory. We’re a bad-apple farm.’

一项主要研究询问了白人民族主义者如何变得激进，大多数人提到了互联网——YouTube 是对他们影响最大的网站。另一项针对 Twitter 上极右翼人士的研究发现，YouTube 是迄今为止他们访问最多的网站。“只要看 YouTube 就会让人变得激进，”特里斯坦解释道。他向记者 Decca Aitkenhead 解释说，像 YouTube 这样的公司希望我们认为“我们有一些害群之马”，但他们不希望我们问：“我们是否有一个系统化的系统，当你每次转动曲柄时？日，煽动更多激进主义？我们正在种植坏苹果。我们是一家坏苹果工厂。我们是一个坏苹果农场。

I saw a vision of where this could take us all in 2018, when I went to Brazil in the run-up to their presidential election, in part to see my friend Raull Santiago, a remarkable young man I got to know when I was writing the Brazilian edition of my book about the war on drugs, *Chasing the Scream*.

2018 年，我在巴西总统选举前夕前往巴西，部分原因是为了见我的朋友劳尔·圣地亚哥（Raull Santiago），他是我在写作时认识的一位杰出的年轻人，我看到了这将给我们所有人带来的愿景。我的关于毒品战争的书《追逐呐喊》的巴西版。

Raull grew up in a place named Complexo do Alemão, which is one of the biggest and poorest favelas in Rio. It’s a huge, jagged zigurat of concrete and tin and wire that stretches far up on the hills, way above the city, until it seems to be almost in the clouds. At least 200,000 people live there, in narrow concrete alleyways that are criss-crossed with makeshift wires providing electricity. The people here built this whole world brick by brick, with little support from the state.

劳尔在一个名为 Complexo do Alemão 的地方长大，这是里约最大、最贫穷的贫民窟之一。这是一座巨大的、锯齿状的、由混凝土、锡和铁丝建成的金字形神塔，一直延伸到山上，远远高于城市，直到它看起来几乎在云端。至少有 20 万人居住在那里，狭窄的混凝土小巷里纵横交错，提供电力的临时电线。这里的人们在几乎没有得到国家支持的情况下，一砖一瓦地建造了这个世界。

The alleyways of Alemão are surreally beautiful: they look like Naples after some undefined apocalypse.

阿莱芒的小巷美得超现实：它们看起来就像经历了一场未定义的世界末日之后的那不勒斯。

As a child, Raull would fly kites high above the favela with his best friend Fabio, where they could see out all across Rio, towards the ocean and the statue of Christ the Redeemer.

小时候，劳尔会和他最好的朋友法比奥在贫民窟的高空放风筝，在那里他们可以看到里约热内卢的整个景色，看到大海和救世主基督的雕像。

Often the authorities would send tanks rolling into the favela. The attitude of the Brazilian state towards the poor was to keep them suppressed with periodic threats of extreme violence. On their way to school, Raull and Fabio would regularly see bodies in the alleyways.

当局经常派坦克开进贫民窟。巴西政府对穷人的态度是通过定期的极端暴力威胁来镇压他们。在上学的路上，劳尔和法比奥经常在小巷里看到尸体。

Everyone in Alemão knew that the cops could shoot poor kids and claim they were drug dealers, and plant drugs or guns on them. In practice, the police had a licence to murder the poor, and everyone knew it.

阿莱芒的每个人都知道警察可以射杀可怜的孩子，并声称他们是毒贩，并向他们放置毒品或枪支。实际上，警察有谋杀穷人的执照，这是每个人都知道的。

Fabio always seemed like the kid most likely to get away from all of this – he was great at maths, and determined to raise money for his mother and disabled sister.

法比奥似乎总是最有可能摆脱这一切的孩子——他数学很好，并决心为他的母亲和残疾的妹妹筹集资金。

He was always figuring out deals – he persuaded the local bars to let him buy their bottles so he could sell them on in bulk, for example.

But then, one day, Raull was told something terrible: Fabio had – like so many kids before him – been shot dead by the police.

他总是在寻找交易——例如，他说服当地的酒吧让他购买他们的瓶子，这样他就可以批量出售它们。但有一天，劳尔被告知一件可怕的事情：法比奥——就像他之前的许多孩子一样——被警察枪杀了。

He was fifteen years old.

他十五岁了。

Raull decided he couldn't just watch his friends being killed one by one – so, as the years passed, he decided to do something bold. He set up a Facebook page named Coletivo Papo Reto, which gathers cell phone footage from across Brazil of the police killing innocent people and planting drugs or guns on them. It became huge with their videos regularly going viral.

劳尔决定他不能眼睁睁地看着他的朋友们被一一杀害——所以，随着时间的流逝，他决定做一些大胆的事情。他建立了一个名为 Coletivo Papo Reto 的 Facebook 页面，该页面收集了巴西各地警察杀害无辜者并向他们放置毒品或枪支的手机镜头。随着他们的视频经常疯传，其规模变得巨大。

Even some people who had defended the police began to see their real behaviour and oppose it. It was an inspiring story about how the internet made it possible for people who have been treated like third-class citizens to find a voice, and to mobilise and fight back.

就连一些为警察辩护的人也开始看清他们的真实行为并提出反对。这是一个鼓舞人心的故事，讲述了互联网如何让那些被当作三等公民对待的人们能够发出声音、动员起来并进行反击。

But at the same time as the web was having this positive effect, the social-media algorithms were having the opposite effect – they were supercharging anti-democratic forces in Brazil. A former military officer named Jair Bolsonaro had been a marginal figure for years. He was way outside the mainstream, because he kept saying vile things and attacking large parts of the population in extreme ways.

但在网络产生这种积极影响的同时，社交媒体算法却产生了相反的效果——它们增强了巴西的反民力量。一位名叫雅伊尔·博尔索纳罗的前军官多年来一直是边缘人物。他远远脱离了主流，因为他不断说一些卑

鄙的话，并以极端的方式攻击大部分民众。

He praised people who had carried out torture against innocent people when Brazil was a dictatorship. He told his female colleagues in the Senate that they were so ugly he wouldn't bother raping them, and that they weren't 'worthy' of it.

他赞扬了在巴西独裁统治时期对无辜人民实施酷刑的人们。他告诉参议院的女同事，她们太丑了，他懒得去强奸她们，而且她们“不值得”这样做。

He said he would rather learn his son was dead than learn his son was gay. Then YouTube and Facebook became one of the main ways people in Brazil got their news. Their algorithms prioritised angry outrageous content – and Bolsonaro's reach dramatically surged. He became a social-media star.

他说他宁愿知道他的儿子已经死了，也不愿知道他的儿子是同性恋。随后 YouTube 和 Facebook 成为巴西人们获取新闻的主要方式之一。他们的算法优先考虑愤怒的、令人发指的内容——博尔索纳罗的影响力急剧上升。他成为社交媒体明星。

He ran for president openly attacking people like the residents of Alemão, saying the country's poorer, blacker citizens 'are not even good for breeding', and should 'go back to the zoo'.

他在竞选总统时公开攻击阿莱芒居民等人，称该国较贫穷、较黑人的公民“甚至不适合繁殖”，应该“回到动物园”。

He promised to give the police even more power to launch intensified military attacks on the favelas – a licence for wholesale slaughter.

他承诺给予警方更大的权力，对贫民窟发动更大规模的军事袭击——这是大规模屠杀的许可证。

Here was a society with huge problems that urgently needed to be solved – but social media algorithms were boosting far-right-wingers and wild disinformation.

这是一个存在亟待解决的巨大问题的社会，但社交媒体算法正在助长极右翼分子和疯狂的虚假信息。

In the run-up to the election, in favelas like Alemão, many people were deeply worried about a story that had been circulating online. Supporters of Bolsonaro had created a video warning that his main rival, Fernando Haddad, wanted to turn all the children of Brazil into homosexuals, and that he had developed a cunning technique to do it.

在选举前夕，在阿莱芒这样的贫民窟，许多人对网上流传的一个故事深感担忧。博尔索纳罗的支持者制作了一段视频，警告他的主要竞争对手费尔南多·哈达德想要将巴西所有儿童变成同性恋，并且他已经开发出一种狡猾的技术来做到这一点。

The video showed a baby sucking a bottle, only there was something peculiar about it – the teat of the bottle had been painted to look like a penis. This, the story that circulated said, is what Haddad will distribute to every kindergarten in Brazil.

视频中，婴儿正在吮吸奶瓶，但有一点很奇特——奶瓶的奶头被涂成了阴茎的样子。据流传的故事称，这就是哈达德将分发给巴西每个幼儿园的东西。

This became one of the most-shared news stories in the entire election. People in the favelas explained indignantly that they couldn't possibly vote for somebody who wanted to get babies to suck these penis-teats, and so they would have to vote for Bolsonaro instead.

这成为整个选举中分享最多的新闻报道之一。贫民窟的人们愤怒地解释说，他们不可能投票给那些想让婴儿吮吸这些阴茎乳头的人，所以他们只能投票给博尔索纳罗。

On these algorithm-pumped absurdities, the fate of the whole country turned.

在这些算法驱动的荒谬行为中，整个国家的命运发生了转变。

When Bolsonaro unexpectedly won the presidency, his supporters chanted 'Facebook! Facebook! Facebook!' They knew what the algorithms had done for them. There were, of course, many other factors at work in Brazilian society – this is only one – but it is the one Bolsonaro's gleeful followers picked out first.

当博尔索纳罗出人意料地赢得总统宝座时，他的支持者高

呼“Facebook！” Facebook！ Facebook！”他们知道算法为他们做了什么。当然，巴西社会还有许多其他因素在起作用——这只是其中一个——但这是博尔索纳罗兴高采烈的追随者首先指出的一个。

Not long afterwards, Raull was in his home in Alemão when he heard a noise that sounded like an explosion. He ran outside and saw that a helicopter was hovering above the favela and firing down at the people below – precisely the kind of violence Bolsonaro had pledged to carry out.

不久之后，劳尔在阿莱芒的家中听到了类似爆炸的声音。他跑到外面，看到一架直升机正在贫民窟上空盘旋，并向下面的人们开火——这正是博尔索纳罗承诺实施的暴力行为。

Raull screamed for his kids to hide, terrified. When I spoke to Raull on Skype later, he was more shaken than I had seen him before. As I write, this violence is being ramped up more and more.

劳尔惊恐地尖叫着让他的孩子们躲起来。当我后来在 Skype 上与劳尔交谈时，他比我以前见过的更加震惊。在我撰写本文时，这种暴力行为正在日益加剧。

When I thought about Raull, I could see the deeper way the rage-driven algorithms of social media and YouTube damage attention and focus. It's a cascading effect. These sites harm people's ability to pay attention as individuals.

当我想到劳尔时，我可以看到社交媒体和 YouTube 的愤怒驱动算法损害注意力和焦点的更深层次方式。这是一种级联效应。这些网站损害了人们作为个人的注意力。

Then they pump the population's heads full of grotesque falsehoods, to the point where they can't distinguish real threats to their existence (an authoritarian leader pledging to shoot them) from non-existent threats (their children being made gay by penises painted on baby bottles).

然后，他们向人们灌输荒唐的谎言，以至于他们无法区分对他们的存在的真正威胁（一位独裁领导人发誓要开枪射杀他们）和不存在的威胁（他们的孩子被画在婴儿身上的阴茎变成同性恋）瓶）。

Over time, if you expose any country to all this for long enough, it will

become so lost in rage and unreality that it can't make sense of its problems and it can't build solutions.

随着时间的推移，如果任何国家长期暴露在这一切之下，它就会陷入愤怒和不现实之中，无法理解自己的问题，也无法制定解决方案。

This means that the streets and the skies actually become more dangerous – so you become hypervigilant, and this wrecks your attention even more.

这意味着街道和天空实际上变得更加危险——因此你变得过度警惕，这会更加分散你的注意力。

This could be the future for all of us if we continue with these trends. Indeed, what happens in Brazil alone directly affects your life and mine. Bolsonaro has dramatically stepped up the destruction of the Amazon rainforest – the lungs of the planet.

如果我们继续这些趋势，这可能是我们所有人的未来。事实上，仅巴西发生的事情就直接影响你我的生活。博索纳罗大幅加剧了对地球之肺——亚马逊雨林的破坏。

If this continues for much longer, it will tip us into an even worse climate disaster.

如果这种情况持续更长时间，我们将陷入更严重的气候灾难。

When I was discussing all this with Tristan one day back in San Francisco, he ran his fingers through his hair and said to me that these algorithms are ‘debasing the soil of society ... You need ... a social fabric, and if you debase it, you don't know what you are going to wake up to.’

有一天，当我在旧金山与特里斯坦讨论这一切时，他用手指梳理着头发，对我说，这些算法“正在贬低社会的土壤……你需要……一种社会结构，如果你贬低它，你不知道醒来后会发生什么。



This machinery is systematically diverting us – at an individual and a social level – from where we want to go. James Williams, the former Google strategist, said to me we should imagine ‘if we had a GPS and

it worked fine the first time. But the next time, it took you a few streets away from where you wanted to go. And then later, it took you to a different town.’ All because the advertisers who funded GPS had paid for this to happen.

这个机器正在系统性地使我们——在个人和社会层面上——偏离我们想去的地方。前谷歌策略师詹姆斯·威廉姆斯对我说，我们应该想象一下‘如果我们有一个 GPS 并且它第一次运行得很好。但下一次，你却偏离了你想去的地方几条街。然后，它会带你去另一个城镇。’这一切都是因为资助 GPS 的广告商为这一切的发生付出了代价。

‘You would never keep using that.’ But social media works exactly this way. There’s a ‘destination we want to get to, and most of the time, it doesn’t actually get us there – it takes us off track.

“你永远不会继续使用它。”但社交媒体正是这样运作的。有一个“我们要到达的目的地，但大多数时候，它实际上并没有让我们到达那里——它让我们偏离了轨道”。

If it was actually navigating us not through informational space but through physical space, we would never keep using it. It would be, by definition, defective.’

如果它实际上不是通过信息空间而是通过物理空间引导我们，我们将永远不会继续使用它。从定义上来说，它是有缺陷的。”



Tristan and Aza started to believe that all these effects, when you add them together, are producing a kind of ‘human downgrading.’ Aza said: ‘I think we’re in the process of reverse-engineering ourselves.

特里斯坦和阿扎开始相信，所有这些影响，当你把它们加在一起时，正在产生一种“人类的降级”。阿扎说：“我认为我们正在对自己进行逆向工程。”

[We discovered a way to] open up the human skull, find the strings that control us, and start pulling on our own marionette strings.

[我们发现了一种方法]打开人类的头骨，找到控制我们的绳子，并开始拉动我们自己的木偶绳子。

Once you do that, an accidental jerk in one direction causes your arm to jerk further, which pulls your marionette string further ... That's the era that we're headed into now.' Tristan believes that what we are seeing is 'the collective downgrading of humans and the upgrading of machines'.

一旦你这样做了，一个方向的意外猛拉就会导致你的手臂进一步猛拉，从而将你的木偶线拉得更远……这就是我们现在正在进入的时代。”特里斯坦认为，我们所看到的是“集体降级”人类和机器的升级”。

We are becoming less rational, less intelligent, less focused.

我们变得越来越不理性、越来越不聪明、越来越不专注。

Aza told me: 'Imagine if you have worked your entire career towards a technology that you feel is good. It's making democracy stronger. It's changing the way you live. Your friends value you because of these things you've made. All of a sudden you're like – that thing I've been working on my entire life is not just meaningless. It's tearing apart the things you love the most.'

阿扎告诉我：“想象一下，如果你整个职业生涯都致力于一项你认为很好的技术。它使民主更加强大。它正在改变您的生活方式。你的朋友因为你所做的这些事情而重视你。突然间你会想——我一生都在努力的事情不仅仅是毫无意义的。它正在撕毁你最爱的东西。”

He told me that literature is full of stories where humans create something in a burst of optimism and then lose control of their creation. Dr Frankenstein creates a monster only for it to escape from him and commit murder. Aza began to think about these stories when he talked with his friends who were engineers working for some of the most famous websites in the world.

他告诉我，文学中充满了这样的故事：人类在一阵乐观中创造了一些东西，然后失去了对自己创造的控制。弗兰肯斯坦博士创造了一个怪物，只是为了让它逃离他并犯下谋杀罪。当阿扎与在世界上一些最著名网站工作的工程师朋友交谈时，他开始思考这些故事。

He would ask them basic questions, like why their recommendation engines recommend one thing over another and, he said to me, 'They're like: we're not sure why it's recommending those things.'

They're not lying – they have set up a technology that is doing things they don't fully comprehend.

他会问他们一些基本问题，比如为什么他们的推荐引擎推荐一种东西而不是另一种东西，他对我说，“他们就像：我们不确定为什么它推荐这些东西。”他们没有撒谎——他们有建立一种技术来完成他们不完全理解的事情。

He always says to them: 'Isn't that exactly the moment, in the allegories, where you turn the thing off – [when] it's starting to do things you can't predict?'

他总是对他们说：“在寓言中，这不就是你把东西关掉的时刻吗——[当]它开始做你无法预测的事情时？”

When Tristan testified about this before the Senate, he asked: 'How can we solve the world's most urgent problems if we've downgraded our attention spans, downgraded our capacity for complexity and nuance, downgraded our shared truth, downgraded our beliefs into conspiracy-theory thinking, where we can't construct shared agendas to solve our problems? This is destroying our sense-making, at a time when we need it the most.

当特里斯坦在参议院作证时，他问道：“如果我们降低了我们的注意力广度，降低了我们处理复杂性和细微差别的能力，降低了我们共同的真理，降低了我们的信仰为阴谋，我们如何才能解决世界上最紧迫的问题——理论思维，我们不能构建共同议程来解决我们的问题吗？在我们最需要它的时候，这正在摧毁我们的意义建构。

And the reason why I'm here is because every day it's incentivised to get worse.' He said he was especially worried about this, he told me later, because we are now, as a species, facing our biggest challenge ever – the fact that we are destroying the ecosystem we depend on for life by triggering the climate crisis. If we can't focus, what possible hope do we have to solve global warming?

我之所以来这里，是因为每天情况都会变得更糟。”他后来告诉我，他特别担心这一点，因为我们现在，作为一个物种，面临着有史以来最大的挑战——事实我们正在通过引发气候危机来破坏我们赖以生存的生态系统。如果我们不能集中注意力，我们还有什么希望解决全球变暖问题呢？

So Tristan and Aza started to ask with increasing urgency: How, in practice, do we change the machinery that is stealing our attention?

因此，特里斯坦和阿扎开始越来越紧迫地问：在实践中，我们如何改变那些吸引我们注意力的机制？

Cause Seven: The Rise of Cruel Optimism (or: Why Individual Changes are an Important Start, But Not Enough)

8

8 原因七：残酷乐观主义的兴起（或：为什么个人改变是一个重要的开始，但还不够）

‘I was with my daughter that afternoon,’ the Israeli-American tech designer Nir Eyal said to me, as he looked back on the day that it hit him that something had gone really wrong.

“那天下午我和我的女儿在一起，”以色列裔美国科技设计师尼尔·埃亚尔 (Nir Eyal) 对我说，当他回顾那一天时，他突然意识到出了什么问题。

‘We had this beautiful afternoon planned’ – they were going through a daddy-and-daughter book, and she got to a page that asked: if you could have any superpower, which one would you choose?

“我们计划好了这个美好的下午”——他们正在翻一本关于父女的书，她读到的一页问：如果你可以拥有某种超能力，你会选择哪一个？

As she was contemplating this, Nir received a text, and ‘I started looking at my phone, as opposed to being fully present with her.’

When he looked up, she was gone.

当她正在思考这个问题时，尼尔收到一条短信，“我开始看手机，而不是完全和她在一起。”当他抬起头时，她已经走了。

A childhood is made up of small moments of connection between a child and their parent. If you miss them, you don't ever get them back. Nir realised with a lurch: 'She got the message that whatever was on my phone was more important than she was.'

童年是由孩子和父母之间的微小联系组成的。如果你想念它们，你就永远无法把它们找回来。尼尔猛地意识到：“她得到的信息是，我手机上的任何内容都比她更重要。”

This wasn't the first time. 'I realised – wow, I really need to reconsider my relationship with distraction.' Except Nir's relationship to the technology causing this was different from yours or mine in a crucial way. Like Tristan, he studied with B. J. Fogg in his lab of 'persuasive technologies' at Stanford, and he went on to work with some of the most influential companies in Silicon Valley, helping them figure out how to get their users 'hooked'. Now he was seeing it happen even to his own young daughter. She would scream at him: 'iPad time! iPad time!' and demand to go online. Nir realised he needed to figure out a strategy for how to overcome this – for her, for himself, and for all of us.

这已经不是第一次了。“我意识到——哇，我真的需要重新考虑我与分心的关系。”除了尼尔与造成这种情况的技术的关系与你或我的关系有一个关键的不同。和特里斯坦一样，他在斯坦福大学的“说服技术”实验室中师从 B. J. Fogg，随后与硅谷一些最有影响力的公司合作，帮助他们弄清楚如何让用户“着迷”。现在他甚至看到这种事发生在他自己的小女儿身上。她会对他尖叫：“iPad 时间到了！ iPad 时间！”并要求上网。尼尔意识到他需要找出一个克服这个问题的策略——为了她，为了他自己，也为了我们所有人。

He offers one particular way of dealing with this crisis that I want to engage with in detail. It is very different from the approach that Tristan and Aza have developed. Nir's approach is important because it's pretty clear this is going to be the approach that the wider tech industry offers us for the attention problems they are, in part, causing.

他提供了一种处理这场危机的特殊方法，我想详细讨论一下。这与特里斯坦和阿扎开发的方法有很大不同。尼尔的方法很重要，因为很明显，这将是更广泛的科技行业为我们提供的方法，以解决它们在一定程

度上造成的注意力问题。

Somewhere at the back of his mind, Nir already had a template for what he believed he had to do. When he was young, Nir had been seriously overweight – something that shocked me when he said it, because he is now lean, bordering on buff.

在尼尔的内心深处，他已经有了一个他认为自己必须做的事情的模板。尼尔年轻时曾严重超重——当他说出这句话时，我感到很震惊，因为他现在很瘦，近乎发黄。

He was sent to ‘fat camp’, and tried all sorts of diets and detoxes, stripping out sugar or fast food. Nothing worked. Then, finally, he realised: ‘As much as I would have loved to blame McDonald’s for the problem, that wasn’t the problem. I was eating my feelings. I was using food as a coping mechanism.’ Once he knew this, he said, he could ‘actually tackle the problem’.

他被送到“肥胖营”，尝试了各种节食和排毒，戒掉糖或快餐。什么都没起作用。最后，他意识到：“尽管我很想把问题归咎于麦当劳，但这并不是问题所在。”我正在吃我的感情。我用食物作为应对机制。”他说，一旦他知道了这一点，他就可以“真正解决这个问题”。

He got in touch with his own anxieties and unhappiness, and he took up wrestling, and slowly began to change his body.

他接触到了自己的焦虑和不快乐，开始练习摔跤，慢慢地开始改变自己的身体。

‘Clearly, food had a role,’ he said, ‘but it wasn’t the root cause of my problem.’ He said he had learned a key lesson: ‘In my life, I had something that felt like it controlled me, and I controlled it.’

“显然，食物发挥了作用，”他说，“但这不是我问题的根本原因。”他说他学到了一个重要的教训：“在我的生活中，我感觉有某种东西控制着我，我控制了它。

Nir came to believe that if we are going to overcome this process of becoming hooked to our apps and devices, we have to develop individual skills to resist the part inside all of us that succumbs to these distractions.

尼尔开始相信，如果我们要克服对应用程序和设备上瘾的过程，我们就必须发展个人技能，以抵制我们内心屈服于这些干扰的部分。

He argues that to do that, we primarily have to look inwards – to the reasons why we want to use them compulsively in the first place. People like Tristan and Aza, he said, ‘tell me about how bad these companies are. I say, well, what have you tried? Right? What have you done?’

他认为，要做到这一点，我们首先必须向内审视——首先了解我们要强迫性使用它们的原因。他说，像特里斯坦和阿扎这样的人，“告诉我这些公司有多糟糕”。我说，好吧，你尝试了什么？正确的？你做了什么？

Often, it’s nothing.’ He believes individual changes should be ‘the first line of defence’, and ‘it has to begin with a bit of introspection, with a bit of understanding ourselves’. Yes, he says, the environment changed: ‘You [the average tech user] didn’t make the iPhone.

通常，这没什么。”他认为个人的改变应该是“第一道防线”，并且“必须从一点内省、一点了解自己开始”。是的，他说，环境发生了变化：“iPhone 不是你（普通科技用户）制造的。”

It’s not your fault. I never said it’s your fault. I’m saying it’s your responsibility. This stuff isn’t going away. In some form or other, it’s here to stay. What choice do we have? We have to adapt. That’s our only option.’

这不是你的错。我从来没有说过这是你的错。我是说这是你的责任。这些东西不会消失。以某种形式，它会一直存在。我们有什么选择？我们必须适应。这是我们唯一的选择。

So how can we adapt? What can we do? He began to read through the social-science literature, to find evidence for individual changes you can make. He laid out what he sees as the best answers in his book *Indistractable*. There is one tool in particular that he believes can get us out of this problem. All of us have ‘internal triggers’ – moments in our lives that push us to give in to bad habits. Nir realised that for him, it’s ‘when I’m writing – it’s never come easy. It’s always difficult.’ When he sat at his laptop and tried to write, he would often start to

feel bored or stressed.

那么我们该如何适应呢？我们可以做什么？他开始阅读社会科学文献，寻找可以做出个人改变的证据。他在《不可分心》一书中列出了他认为最好的答案。他认为有一个特别的工具可以帮助我们摆脱这个问题。我们所有人都有“内部触发因素”——生活中促使我们屈服于坏习惯的时刻。尼尔意识到，对他来说，“当我写作时——这从来都不是一件容易的事。”这总是很困难。”当他坐在笔记本电脑前尝试写作时，他常常会开始感到无聊或压力。

‘All of these bad things come bubbling up when I’m writing.’ When that happened, it would trigger something inside him. To get away from these uncomfortable feelings, he would tell himself there was something else he had to do, for just a moment.

“当我写作时，所有这些不好的事情都会冒出来。”当这种情况发生时，它会触发他内心的某些东西。为了摆脱这些不舒服的感觉，他会告诉自己还有其他事情要做，哪怕只是一会儿。

‘The easiest thing to do would be – let me just check email real quick. Let me just open my phone real quick.’ He said: ‘I would think of every single conceivable excuse.’ He would compulsively check the news, telling himself that’s what a good citizen does.

“最简单的事情就是——让我快速查看电子邮件。让我快点打开手机。”他说：“我会想出每一个可以想到的借口。”他会不由自主地查看新闻，告诉自己这就是一个好公民该做的事情。

He would google a fact supposedly relevant to his writing, and two hours later he would find himself at the bottom of a rabbit hole, looking at something totally irrelevant.

他会用谷歌搜索一个据称与他的写作相关的事实，两个小时后，他会发现自己陷入了兔子洞的底部，看着一些完全不相关的东西。

‘An internal trigger is an uncomfortable emotional state,’ he told me. ‘It’s all about avoidance. It’s all about – how do I get out of this uncomfortable state?’ He believes we all need to explore our triggers non-judgementally, think about them, and find ways to disrupt them.

“内部触发因素是一种不舒服的情绪状态，”他告诉我。‘这都是为了逃避。这一切都是为了——我如何摆脱这种不舒服的状态？’他认为我们都

需要不加评判地探索我们的触发因素，思考它们，并找到破坏它们的方法。

So whenever he felt that prickling feeling or boredom or stress come to him, he identified what was happening, and picked up a pack of Post-It notes, and he wrote on it what he wanted to know.

因此，每当他感到刺痛、无聊或压力袭来时，他就会找出发生了什么，然后拿起一包便利贴，在上面写下他想知道的内容。

Later, when he had finished a good stretch of writing, he would let himself google it – but only then.

后来，当他写完一大段文字后，他会让自己用谷歌搜索——但只有那时。

It worked for him. This taught Nir that ‘we’re not beholden to habits. They can be interrupted. They get interrupted all the time. We can change habits.

这对他有用。这告诉尼尔“我们不应该受制于习惯”。他们可以被打断。他们总是被打断。我们可以改变习惯。

The way we change a habit is by understanding what the internal trigger is, and making sure that there’s some kind of break between the impulse to do a behaviour and the behaviour itself.’ He developed a range of techniques like this.

我们改变习惯的方法是了解内部触发因素是什么，并确保采取某种行为的冲动与行为本身之间存在某种中断。”他开发了一系列这样的技术。

He believes we should all try adopting a ‘ten-minute rule’ – if you feel the urge to check your phone, wait ten minutes. He says you should ‘time-box’ – which means you should draw up a detailed schedule of what you are going to do each day, and stick to it.

他认为我们都应该尝试采用“十分钟规则”——如果您想查看手机，请等待十分钟。他说你应该“设定时间范围”——这意味着你应该为每天要做的事情制定一个详细的时间表，并坚持下去。

He recommends changing the notification settings on your phone, so

that your apps can't interrupt you and kill your focus throughout the day.

他建议更改手机上的通知设置，这样您的应用程序就不会打扰您并分散您一整天的注意力。

He says you should delete all the apps you can from your phone, and if you have to keep some, then you should schedule the time you are willing to spend on them in advance.

他说你应该从手机上删除所有可以删除的应用程序，如果你必须保留一些应用程序，那么你应该提前安排好你愿意花在它们上的时间。

He advises that you unsubscribe from email lists, and – if you can – have ‘office hours’ on your email, when you check them a few times a day, and ignore them the rest of the time.

他建议你取消订阅电子邮件列表，并且——如果可以的话——在你的电子邮件上设置“办公时间”，每天检查几次，其余时间忽略它们。

By laying out these tools, he told me, ‘I wanted to empower people to realise – look, this isn't that hard. It's not that tough.

他告诉我，通过展示这些工具，‘我想让人们意识到——看，这并不难。这并不难。

If you know what to do, it's pretty simple how to handle distraction.’ He seemed puzzled that more people don't do it: ‘Two-thirds of people with a smartphone never change their notification settings. What? Right? This is not hard stuff.

如果你知道该怎么做，那么如何处理分心就非常简单了。”他似乎很困惑，为什么越来越多的人不这样做：“三分之二的拥有智能手机的人从不改变他们的通知设置。什么？正确的？这不是什么难事。

We just need to do this kind of stuff.’ Instead of railing against the tech companies, he says, we need to ask what we have done as individuals. He asked me: ‘Why isn't the beginning of the discussion – okay, have we exhausted everything you can do right now?

我们只需要做这样的事情。”他说，我们不需要责怪科技公司，而是需要问问我们作为个人都做了什么。他问我：‘为什么讨论还没开始——好

吧，我们已经用尽你现在能做的一切了吗？

Can we do that stuff first? ... Change your notification settings! Come on, this is basic stuff, right? Turn off the fucking Facebook notifications every five minutes! How about planning your day, you know? How many of us plan our day? We just let our time be usurped by the news or whatever's on Twitter or whatever's happening in the world outside us, as opposed to saying – actually what do I want to do with my time?’

我们可以先做那些事情吗？ ...更改您的通知设置！来吧，这是基本的东西，对吧？关掉他妈的每五分钟一次的 Facebook 通知！计划一下你的一天怎么样，你知道吗？我们中有多少人计划我们的一天？我们只是让我们的时间被新闻或 Twitter 上的任何内容或我们外部世界发生的任何事情所侵占，而不是说 – 实际上我想用我的时间做什么？



I felt conflicted as Nir explained this to me. I realised he was articulating precisely the logic that had taken me to Provincetown. Something deep inside me thought like this. Like him, I believed: this is a problem in you, and you need to change yourself.

当尼尔向我解释这一点时，我感到很矛盾。我意识到他所表达的正是带我去普罗温斯敦的逻辑。我内心深处有这样的想法。我和他一样相信：这是你的问题，你需要改变自己。

There was clearly some truth in it. Every specific intervention Nir recommends is, I believe, helpful. I tried each one of them after going through his work, and several of them made a small but real difference to me.

这显然有一定道理。我相信尼尔建议的每一项具体干预措施都是有帮助的。在读完他的作品后，我尝试了其中的每一项，其中有几项对我产生了微小但真正的影响。

But there was something about what he said that made me feel uncomfortable, and for a while, I couldn't articulate it. Nir's approach is absolutely in line with how the tech companies want us to think about our attention problems. They can no longer deny the crisis, so they are doing something else: subtly urging us to see it as an

individual problem that has to be solved with greater self-restraint on my part and yours, not theirs.

但他说的话让我有些不舒服，一时说不出来。尼尔的方法绝对符合科技公司希望我们思考注意力问题的方式。他们无法再否认这场危机，因此他们正在做其他事情：巧妙地敦促我们将其视为一个个人问题，必须由我和你（而不是他们）通过更大的自我克制来解决。

That's why they began to offer tools they argued would help you to strengthen your willpower. All new iPhones have an option where you could be told how much Screen Time you spent that day and that week, and a Do Not Disturb function where you can block out incoming messages. Facebook and Instagram introduced their own modest equivalents. Mark Zuckerberg even started using Tristan's slogan, promising that time on Facebook would be 'time well spent' – except for him, it was all about Nir-style tools where you reflect on what's gone wrong with your own motives.

这就是为什么他们开始提供他们认为可以帮助你增强意志力的工具。所有新款 iPhone 都有一个选项，可以告诉您当天和那一周的屏幕使用时间，以及“请勿打扰”功能，您可以屏蔽传入的消息。Facebook 和 Instagram 也推出了自己的类似产品。马克·扎克伯格甚至开始使用特里斯坦的口号，承诺在 Facebook 上的时间将是“值得的时间”——除了他之外，一切都是 Nir 式的工具，你可以在其中反思自己的动机出了问题。

I am writing this chapter about Nir not because he is unusual, but because he is the most candid of the people putting forward the dominant view in Silicon Valley about what you and I should do now.

我写关于尼尔的这一章并不是因为他与众不同，而是因为他是硅谷提出关于你我现在应该做什么的主流观点的人中最坦率的人。

Nir kept insisting that the tech companies have done a lot to make it easy for us to unplug. To explain this, he gave the example of a company boardroom he had been to where the boss took out his phone in a meeting, so everyone else felt free to do it.

尼尔一直坚称，科技公司已经做了很多工作，让我们可以轻松地拔掉电源。为了解释这一点，他举了一个他去过的公司董事会的例子，老板在开会时拿出手机，所以其他人都可以随意这样做。

‘I don’t know why that’s the tech company’s responsibility. In fact, if anything, the tech company gives you this beautiful little function here that [says] “do not disturb”. The tech company gave us a button. All you have to do is that.

“我不知道为什么这是科技公司的责任。事实上，如果有的话，科技公司在这里为你提供了这个漂亮的小功能，[说]“请勿打扰”。科技公司给了我们一个按钮。你所要做的就是这样。

What more responsibility do we want from Apple? For God’s sake, push the fucking button that says “do not disturb” for an hour if you’re going to have a meeting with your colleagues. Is that so difficult?’

我们还希望苹果承担什么更多的责任？看在上帝的份上，如果你要和同事开会，就按那个该死的“请勿打扰”按钮一个小时。有那么难吗？

My unease about this approach only became clear to me when I turned to the book Nir wrote a few years before he produced his work about how to beat distraction. It was written for an audience of tech designers and engineers, and it was named *Hooked: How to Build Habit-Forming Products*. He described it as a ‘cookbook’ containing ‘a recipe for human behaviour’. Reading *Hooked* as an ordinary user of the internet is strange – it’s like the moment in an old Batman movie when the villain is caught and reveals everything he did all along, step by step. Nir writes: ‘Let’s admit it: we are all in the persuasion business. Innovators build products meant to persuade people to do what we want them to do.

当我翻阅尼尔几年前写的关于如何克服分心的著作时，我对这种方法的不安才变得清晰起来。它是为技术设计师和工程师的读者编写的，它被命名为《Hooked：如何构建习惯形成产品》。他将其描述为一本“食谱”，其中包含“人类行为的秘诀”。作为一个普通的互联网用户来阅读《Hooked》是很奇怪的——这就像一部老蝙蝠侠电影中的那一刻，恶棍被抓住，并一步步揭露他一直以来所做的一切。尼尔写道：“让我们承认这一点：我们都在从事说服工作。创新者开发的产品旨在说服人们做我们希望他们做的事情。

We call these people users and even if we don’t say it aloud, we secretly wish every one of them would become fiendishly hooked to

whatever we're making.'

我们称这些人为用户，即使我们没有大声说出来，我们也暗自希望他们中的每一个人都能对我们正在制作的任何东西着迷。

He lays out the methods to achieve this, which he describes as 'mind manipulation'. The goal, Nir says, is to 'create a craving' in human beings – and he cites B. F. Skinner as a model for how to do it. His approach can be summarised by the headline on one of his blog posts: 'Want to hook your users? Drive them crazy'.

他列出了实现这一目标的方法，他将其描述为“精神操纵”。尼尔说，我们的目标是让人类“产生一种渴望”——他引用 B. F. 斯金纳 (B. F. Skinner) 作为实现这一目标的典范。他的方法可以用他一篇博文的标题来概括：“想吸引你的用户吗？”让他们发疯’。

The goal of the designer is to create an 'internal trigger' (remember them?) that will keep the user coming back again and again. To help the designer picture the kind of person they are targeting, he says they should imagine a user he names Julie, who 'fears being out of the loop'. He comments: 'Now we've got something!'

设计师的目标是创建一个“内部触发器”（还记得它们吗？），让用户一次又一次地回来。他说，为了帮助设计师描绘出他们的目标人群，他们应该想象一个他命名为朱莉的用户，她“害怕被排除在外”。他评论道：“现在我们有了一些东西！

Fear is a powerful internal trigger, and we can design our solution to help calm Julie's fear.' Once you have succeeded in playing on feelings like this, 'a habit is formed, [and so] the user is automatically triggered to use the product during routine events such as wanting to kill time while waiting in line,' he writes approvingly.

恐惧是一种强大的内部触发因素，我们可以设计解决方案来帮助平息朱莉的恐惧。”一旦你成功地利用了这样的感觉，“就会形成一种习惯，[因此]用户会自动触发使用该产品在例行活动中，例如想在排队等候时消磨时间，”他赞许地写道。

Designers should get you and me 'to repeat behaviours for long periods, ideally for the rest of their lives', he writes.

他写道，设计师应该让你和我“长期重复行为，最好是在余生中”。

He says he believes this makes people's lives better, but he also notes: 'Habits can be very good for the bottom line.' Nir says there should be some ethical limits to this: it is wrong to target children, and he believes designers need to 'get high on their own supply' and use their own apps themselves.

他说，他相信这会人们的生活变得更好，但他也指出：“习惯对盈利非常有好处。”尼尔说，对此应该有一些道德限制：以儿童为目标是错误的，他认为设计师需要“对自己的供应感到兴奋”并自己使用自己的应用程序。

He is not opposed to all regulations – he believes it should be a legal requirement that if you spend more than thirty-five hours on Facebook a week, you should see a pop-up saying you might have a problem and directing you towards a place to get help.

他并不反对所有规定——他认为这应该成为一项法律要求，即如果你每周在 Facebook 上花费超过 35 小时，你应该看到一个弹出窗口，说你可能遇到问题，并引导你前往某个地方寻求帮助。

But as I read all this, I was troubled. Nir's 'cookbook' for how to design apps became hugely successful – the CEO of Microsoft, for example, held it aloft and told her staff to read it, and Nir is a hugely popular speaker at tech conferences. Many apps were built inspired by his techniques. Nir was one of the people who led Silicon Valley in the charge to 'drive them crazy' – and yet when people like my godson Adam were, in fact, driven crazy, he told me that the solution is primarily to change our individual behaviour, not the actions of the tech companies.

但当我读到这一切时，我感到很困惑。尼尔关于如何设计应用程序的“食谱”取得了巨大成功 - 例如，微软首席执行官将其高举并告诉她的员工阅读，尼尔是技术会议上非常受欢迎的演讲者。许多应用程序都是受他的技术启发而构建的。尼尔是领导硅谷“让他们发疯”的人之一——然而，当像我的教子亚当这样的人实际上被逼疯时，他告诉我，解决方案主要是改变我们的个人行为，而不是科技公司的行为。

When we talked, I explained to him that, for me, it seemed like there was a worrying mismatch between his two books. In *Hooked* he talks about using ferociously powerful machinery to get us 'fiendishly hooked' and in 'pain' until we get our next techno-fix. Yet in *Indistractable* he tells us that when we feel distracted by this

machinery, we should try gentle personal changes. In the first book, he describes big and powerful forces used to hook us; in the second, he describes fragile little personal interventions that he says will get us out.

当我们交谈时，我向他解释说，对我来说，他的两本书之间似乎存在令人担忧的不匹配。在《Hooked》中，他谈到使用极其强大的机器让我们“疯狂地着迷”并处于“痛苦”中，直到我们得到下一个技术解决方案。然而，在《不可分心》中，他告诉我们，当我们感到被这种机器分心时，我们应该尝试温和的个人改变。在第一本书中，他描述了用来吸引我们的巨大而强大的力量；在第二部分中，他描述了脆弱的个人干预措施，他说这些干预措施可以让我们摆脱困境。

‘I see exactly the opposite, in fact,’ he said in response. ‘Everything I talked about in *Hooked*, you can turn off with the tap of one thumb. Fuck them.’

“事实上，我的看法恰恰相反，”他回答道。“我在《Hooked》中谈到的所有内容，你都可以用一根拇指轻按一下来关闭。操他们。



I understood my growing discomfort with Nir’s approach more fully when I talked it over with several other people. One was Ronald Purser, who is professor of management at San Francisco State University. He introduced me to an idea I hadn’t heard before – a concept named ‘cruel optimism’. This is when you take a really big problem with deep causes in our culture – like obesity, or depression, or addiction – and you offer people, in upbeat language, a simplistic individual solution.

当我与其他几个人讨论过 Nir 的做法后，我更加充分地理解了我对 Nir 的做法日益感到的不安。其中一位是旧金山州立大学管理学教授罗纳德·普尔瑟（Ronald Purser）。他向我介绍了一个我以前从未听说过的想法——一个名为“残酷乐观”的概念。当你解决一个在我们的文化中具有深层原因的真正大问题时——比如肥胖、抑郁或成瘾——你可以用乐观的语言为人们提供一个简单的个人解决方案。

It sounds optimistic, because you are telling them that the problem can be solved, and soon – but it is, in fact, cruel, because the solution you are offering is so limited, and so blind to the deeper causes, that for most people, it will fail.

这听起来很乐观，因为你告诉他们问题很快就能解决——但事实上，这是残酷的，因为你提供的解决方案非常有限，而且对更深层次的原因视而不见，对大多数人来说，它会失败。

Ronald gave lots of examples of this idea, which was first coined by the historian Lauren Berlant. I started to really grasp this idea when he applied this concept to an idea that's related to attention but separate to it – stress. I think it's worth taking a little time to go through it, because I believe it can help us to see a mistake that Nir – and many us – are making when it comes to focus.

罗纳德举了很多这个想法的例子，这个想法最初是由历史学家劳伦·伯兰特 (Lauren Berlant) 提出的。当他将这个概念应用到一个与注意力相关但与之独立的概念——压力时，我开始真正理解这个概念。我认为值得花一点时间来回顾一下，因为我相信它可以帮助我们看到尼尔——以及我们许多人——在专注方面所犯的错误。

Ronald talked to me about a best-selling book by a *New York Times* reporter that tells its readers: 'Stress isn't something imposed on us. It's something we impose on ourselves.' Stress is a feeling. Stress is a series of thoughts. If you just learn how to think differently – to quiet down your rattling thoughts – your stress will melt away.

罗纳德向我谈到了《纽约时报》记者的一本畅销书，这本书告诉读者：“压力不是强加给我们的。这是我们强加给自己的。”压力是一种感觉。压力是一系列的想法。如果你学会如何以不同的方式思考——让你的胡思乱想平静下来——你的压力就会消失。

So you just need to learn to meditate. Your stress comes from a failure to be mindful.

所以你只需要学会冥想。你的压力来自于未能保持正念。

This message sings off the page with optimistic promise – but Ronald points out that in the real world, the top causes of stress in the US have been identified by scientists at Stanford Graduate School of Business in a major study.

这条信息充满了乐观的希望——但罗纳德指出，在现实世界中，斯坦福大学商学院的科学家们在了一项重大研究中已经确定了美国压力的主要原因。

They are 'a lack of health insurance, the constant threat of lay-offs,

lack of discretion and autonomy in decision-making, long working hours, low levels of organisational justice, and unrealistic demands’.

它们是“缺乏健康保险、持续的裁员威胁、决策缺乏自由裁量权和自主权、工作时间长、组织公正性低以及不切实际的要求”。

If you don't have health insurance and you have diabetes and you can't afford insulin, or if you are forced to work sixty hours a week by a bullying boss, or if you are watching your colleagues get laid off one by one and you suspect with a sickening feeling that you will be next, your stress is not 'something we impose on ourselves'.

如果你没有健康保险，患有糖尿病而买不起胰岛素，或者你被霸凌的老板强迫每周工作六十个小时，或者你眼睁睁地看着同事被一一解雇，当你怀着一种令人作呕的感觉怀疑自己将是下一个时，你的压力并不是“我们强加给自己的”。

It is something imposed on you.

这是强加给你的东西。

Ronald thinks that meditation can help some people, and I agree, but that this typical best-selling book, which tells you to meditate your way through stress and humiliation, is 'bullshit ... Tell it to Hispanic women working three jobs with four kids.' The people who say stress is just a matter of changing your thoughts are, he says, talking 'from a privileged position.

罗纳德认为冥想可以帮助一些人，我同意，但这本典型的畅销书告诉你如何通过冥想来度过压力和羞辱，这是“废话……告诉西班牙裔女性，做三份工作，带着四个孩子。”他说，那些说压力只是改变你的想法的人是“站在特权地位上”。

It's easy for them to say that.' He gave me the example of a company that was cutting back on providing healthcare to some people – and was, at the same time, congratulated by the same *New York Times* writer for providing meditation classes to its employees. You can see clearly how this is cruel. You tell somebody there's a solution to their problem – just think differently about your stress and you'll be fine! – and then leave them in a waking nightmare.

他们很容易这么说。”他给我举了一个例子，一家公司正在削减向某些

人提供的医疗保健费用，同时，同一位《纽约时报》作家也祝贺为其员工提供冥想课程。雇员。你可以清楚地看到这是多么残酷。你告诉某人他们的问题有一个解决方案——只要换个角度思考你的压力，你就会没事的！——然后让他们陷入一场醒着的噩梦。

We won't give workers insulin, but we'll give them classes on how to change their thinking. It's the twenty-first-century version of Marie Antoinette saying, 'Let them eat cake.' Let them be present.

我们不会给工人注射胰岛素，但我们会给他们上如何改变想法的课程。这是二十一世纪版本的玛丽·安托瓦内特所说的：“让他们吃蛋糕。”让他们在场。

While at first glance, cruel optimism seems kind and optimistic, it often has an ugly after-effect. It ensures that when the small, cramped solution fails, as it will most of the time, the individual won't blame the system – she will blame herself. She will think she screwed up and she just wasn't good enough.

虽然乍一看，残酷的乐观主义似乎是仁慈和乐观的，但它往往会产生丑陋的后果。它确保当小而局促的解决方案失败时（大多数情况下都会发生这种情况），个人不会责怪系统——她会责怪自己。她会认为自己搞砸了，只是自己不够好。

Ronald told me, 'It deflects attention away from the social causes of stress,' like overwork, and it can quite quickly turn into a form of 'victim-blaming'. It whispers: the problem isn't in the system; the problem is in you.

罗纳德告诉我，“它会转移人们对压力的社会原因的注意力”，比如过度劳累，而且它很快就会变成一种“指责受害者”的形式。它低声说道：问题不在于系统，而在于系统。问题出在你身上。

As he said this, I thought about Nir again, and the wider Silicon Valley approach he exemplifies. He makes his living from marketing and promoting a digital model that 'hooks' us and plays on our fears and which even he says is designed to make us 'crazy'. That model, in turn, hooked him.

当他说这句话时，我再次想到了 Nir，以及他所体现的更广泛的硅谷方法。他靠营销和推广一种数字模型为生，这种模型“吸引”了我们，利用了我们的恐惧，甚至他自己也说这种数字模型的目的是让我们“疯

狂”。反过来，那个模特也吸引了他。

But because he is in a position of incredible privilege – in terms of wealth, and knowledge of these systems – he was able to use his own techniques to regain some sense of control. Now he thinks the solution is simply for all of us to do the same.

但因为他处于令人难以置信的特权地位——就财富和这些系统的知识而言——他能够利用自己的技术重新获得一些控制感。现在他认为解决办法就是让我们所有人都这样做。

Set aside the fact that it's very convenient for him if we all blame ourselves rather than tackling the deeper problems – after all, his income depends on the tech industry. Look at something more basic. The truth is that it's not so easy for everyone else to do what he has done.

抛开这样一个事实不谈，如果我们都责怪自己而不是解决更深层次的问题，这对他来说是非常方便的——毕竟他的收入取决于科技行业。看看更基本的东西。事实上，其他人要做他所做的事情并不容易。

This is one of the problems with cruel optimism – it takes exceptional cases, usually achieved in exceptional circumstances, and acts as if they can be commonplace.

这是残酷乐观主义的问题之一——它需要特殊的情况，通常是在特殊情况下实现的，却表现得好像它们是司空见惯的。

It's easier to find serenity through meditation when you haven't just lost your job and you aren't wondering how you're going to avoid being evicted next Tuesday. It's easier to say no to the next hamburger, or the next Facebook notification, or the next tab of OxyContin if you aren't exhausted and stressed, and in desperate need of some kind of salve to get you through the next few stress-filled hours.

当你没有刚刚失去工作并且不知道如何避免下周二被驱逐时，通过冥想更容易找到平静。如果你没有精疲力竭、没有压力，并且迫切需要某种药膏来帮助你度过接下来的几个充满压力的时期，那么你会更容易对下一个汉堡包、下一个 Facebook 通知或下一个奥施康定标签说不。小时。

To tell people – as Nir does, and as the wider tech industry increasingly does – that it’s ‘pretty simple’ and that they should just ‘push the fucking button’ is to deny the reality of most people’s lives.

像尼尔所做的那样，以及更广泛的科技行业越来越多地告诉人们，这“非常简单”，他们应该“按一下按钮”，这就是否认大多数人生活的现实。

And, most importantly, people shouldn’t have to do it. Cruel optimism takes it for granted that we can’t significantly change the systems that are wrecking our attention, so we have to mainly focus on changing our isolated selves. But why should we accept these systems as a given?

而且，最重要的是，人们不应该这样做。残酷的乐观主义理所当然地认为我们无法显著改变那些破坏我们注意力的系统，因此我们必须主要关注改变孤立的自我。但为什么我们应该接受这些系统作为既定的呢？

Why should we accept an environment full of programs designed to ‘hook’ us and drive us ‘crazy’?

为什么我们应该接受一个充满旨在“吸引”我们并使我们“疯狂”的程序的环境？

I could see this most clearly when I thought about Nir’s own analogy with the obesity experienced when he was a kid. I think it’s worth taking a moment to think through this comparison, because I think it tells us a lot about where we are going wrong now.

当我想到尼尔自己与他小时候经历的肥胖的类比时，我可以最清楚地看到这一点。我认为值得花点时间思考一下这个比较，因为我认为它告诉了我们很多关于我们现在哪里出了问题的信息。

It seems incredible to us today, but fifty years ago, there was very little obesity in the Western world. Look at a photograph of a beach taken back then: everyone is, by our standards, slim. Then a whole series of changes took place.

这对今天的我们来说似乎不可思议，但五十年前，西方世界很少有肥胖现象。看看当时拍摄的一张海滩照片：按照我们的标准，每个人都很苗条。然后发生了一系列的变化。

We replaced a food-supply system based around fresh, nutritious food with one consisting mainly of processed junk. We massively stressed out our populations, making comfort eating a whole lot more appealing. We built cities that it's often impossible to walk or bike around.

我们用主要由加工垃圾组成的食品供应系统取代了以新鲜、营养丰富的食品为基础的食品供应系统。我们给我们的人民带来了巨大的压力，让舒适的饮食变得更有吸引力。我们建造的城市往往无法步行或骑自行车游览。

In other words, the environment changed, and that – not any individual failing on the part of you or me – changed our bodies. We gained mass, en masse. The average weight gain for an adult between 1960 and 2002 was 24 lbs, or 1.7 stone.

换句话说，环境改变了，而且——不是你我等任何一个人失败了——改变了我们的身体。我们集体获得了大众。1960年至2002年间，成年人的平均体重增加了24磅，即1.7英石。

Then what happened? Rather than acknowledge the wider forces that have done this to us, take them on, and build a healthy environment in which it's easier to avoid obesity, we were taught by the diet industry to blame ourselves as individuals.

然后发生了什么？饮食行业教导我们责怪自己，而不是承认对我们造成这种影响的更广泛的力量，接受它们，并建立一个更容易避免肥胖的健康环境。

We learned to think: I got fat because of a personal failing. I chose the wrong food. I got greedy, I got lazy, I didn't get a handle on my feelings properly, I'm not good enough. We resolved to count the calories better next time.

我们学会了思考：我因为个人失败而发胖。我选择了错误的食物。我变得贪婪，我变得懒惰，我没有正确处理自己的感受，我不够好。我们决定下次更好地计算卡路里。

(I've been there.) Individual diet books and diet plans became the primary answer offered by the culture to a crisis with primarily social

causes.

（我去过那里。）个人饮食书籍和饮食计划成为文化为主要由社会原因造成的危机提供的主要答案。

How is that working out for us? The scientists who have studied it discovered that 95 percent of people in our culture who lose weight on a diet regain it within one to five years. That's nineteen out of every twenty people. Why?

这对我们来说效果如何？研究它的科学家发现，在我们的文化中，95% 通过节食减肥的人会在一到五年内恢复体重。每二十人中有十九人。为什么？

It's because it misses most of why you (and I) gained weight in the first place. It has no systemic analysis.

这是因为它忽略了你（和我）最初体重增加的大部分原因。它没有系统的分析。

It doesn't talk about the crisis in our food supply, which surrounds us with addictive, highly processed foods that bear no relationship to what previous generations of humans ate. It doesn't explain the crisis of stress and anxiety that drives us to overeat.

它没有谈论我们的食品供应危机，我们周围充斥着令人上瘾的高度加工食品，这些食品与前几代人类的饮食毫无关系。它并不能解释导致我们暴饮暴食的压力和焦虑危机。

It doesn't address the fact that we live in cities where you have to squeeze yourself into a steel box to get anywhere. Diet books ignore the fact that you live in a society and culture that are shaping and pushing you, every day, to act in certain ways. A diet doesn't change your wider environment – and it's the wider environment that is the cause of the crisis.

它并没有解决这样一个事实：我们生活在城市里，你必须把自己挤进一个钢盒子里才能到达任何地方。饮食书籍忽略了这样一个事实：你生活在一个每天都在塑造和推动你以某种方式行事的社会和文化中。饮食不会改变你的更广泛的环境——而更广泛的环境才是危机的根源。

Your diet ends, and you're still in an unhealthy environment that's pushing you to gain weight. Trying to lose weight in the environment we've built is like trying to run up an escalator that is constantly carrying you down.

你的节食结束了，但你仍然处于不健康的环境中，这促使你体重增加。在我们构建的环境中试图减肥就像试图爬上一部不断将你带下的自动扶梯。

A few people might heroically sprint to the top – but most of us will find ourselves back at the bottom, feeling like it's our fault.

有些人可能会英勇地冲向顶峰，但我们大多数人会发现自己又回到了谷底，感觉这是我们的错。

If we listen to Nir and the people like him, I fear we will respond to the rise of attention problems in the same way that we responded to the rise in weight problems – and we will end up with the same disastrous outcomes. It's not just Silicon Valley that pushes this approach. Almost all the existing books about attention problems (and I read a lot as research for this book) present them simply as individual flaws requiring individual tweaks. They are digital diet books.

如果我们听取尼尔和像他这样的人的意见，我担心我们会像应对体重问题的增加一样应对注意力问题的增加，并且最终会带来同样的灾难性结果。推动这种方法的不仅仅是硅谷。几乎所有现有的关于注意力问题的书籍（我读了很多关于这本书的研究）都将它们简单地描述为需要单独调整的个体缺陷。它们是数字饮食书籍。

But diet books didn't solve the obesity crisis and digital diet books won't solve the attention crisis. We have to understand the deeper forces at work here.

但饮食书籍并不能解决肥胖危机，数字饮食书籍也无法解决注意力危机。我们必须了解这里起作用的更深层次的力量。

There was a different way we could have reacted to the obesity crisis when it began forty or so years ago.

当肥胖危机大约四十年前开始时，我们可以采取不同的方式来应对。

We could have listened to the evidence that purely practising individual restraint – in an unchanged environment – rarely works for long, except in one in twenty cases like Nir's. We could have looked instead at what does work: changing the environment in specific ways.

我们本可以听听这样的证据：在没有变化的环境中，纯粹实行个人克制很少能长期奏效，除了像尼尔那样的二十分之一的案例。我们本来可以看看什么是有效的：以特定的方式改变环境。

We could have used government policy to make fresh, nutritious food cheap and accessible, and sugar-filled junk expensive and inaccessible. We could have reduced the factors that cause people to be so stressed that they comfort eat.

我们本可以利用政府政策让新鲜、有营养的食品变得便宜且容易获得，而含糖垃圾则变得昂贵且难以获得。我们本可以减少导致人们压力过大的因素，从而让他们吃得舒服。

We could have built cities people can easily walk or bike through. We could have banned the targeting of junk food ads at children, shaping their tastes for life.

我们本可以建造人们可以轻松步行或骑自行车穿过的城市。我们本可以禁止针对儿童的垃圾食品广告，塑造他们的生活品味。

That's why countries that have done some of this – like Norway, or Denmark, or the Netherlands – have much lower levels of obesity, and countries that have focused on telling individual overweight people to pull themselves together, like the US and UK, have very high levels of obesity.

这就是为什么已经采取了一些措施的国家（如挪威、丹麦或荷兰）的肥胖水平要低得多，而那些注重告诉个人超重者振作起来的国家（如美国和英国）的肥胖率却非常低。肥胖率高。

If all the energy people like me had put into shaming and starving ourselves had been put instead into demanding these political changes, there would be far less obesity now, and a lot less misery.

如果像我这样的人把所有用于羞辱和挨饿的精力都投入到要求这些政治变革上，那么现在的肥胖就会少得多，痛苦也会少得多。

Tristan believes we need a similar shift in consciousness around tech. When he testified before the Senate, he told them: ‘You can try having self-control, but there are a thousand engineers on the other side of the screen working against you.’ This precisely what Nir refuses to fully acknowledge – even though he has been one of those designers himself.

特里斯坦认为，我们需要围绕科技进行类似意识转变。当他在参议院作证时，他告诉他们：“你们可以尝试自我控制，但屏幕的另一边有一千名工程师在与你们作对。”这正是尼尔拒绝完全承认的——尽管他本人就是这些设计师之一。

I stress again: I am in favour of each individual piece of advice he offers. You really should take out your phone now and turn off your notifications. You really should figure out your internal triggers. And on, and on. (Tristan believes this too). But it’s not ‘pretty simple’ to get from that to being able to pay attention in an environment designed – in part by Nir himself – to invade and raid your focus.

我再次强调：我赞成他提供的每一条建议。您现在确实应该拿出手机并关闭通知。你真的应该找出你的内部触发因素。继续，继续。（特里斯坦也相信这一点）。但要从这一点到能够在一个环境中集中注意力（部分是由尼尔本人设计）来侵入和掠夺你的注意力，并不是“相当简单”的。

My discussion with Nir got a little heated as we spoke more.

随着我们交谈的增多，我和 Nir 的讨论变得有点激烈。

Because this is one of the few contentious interviews in this book, to be fair to him, I have posted the full audio on the book’s website, so you can hear his responses – including the ones I don’t have space to quote here – in full.

因为这是本书中为数不多的有争议的采访之一，所以为了公平起见，我已经在本书的网站上发布了完整的音频，这样你就可以听到他的回应 - 包括我在这里没有空间引用的内容 - 在全。

Our conversation clarified my thinking in a really helpful way.

我们的谈话以一种非常有帮助的方式澄清了我的想法。

He made me realise that to get our attention back, we are going to have to adopt some individual solutions, to be sure – but we have to be honest enough to tell people that they alone probably won't be enough to get most of us out of this hole.

他让我意识到，为了重新获得我们的注意力，我们必须采取一些单独的解决方案，这是肯定的——但我们必须诚实地告诉人们，仅靠他们可能不足以吸引我们大多数人从这个洞里出来。

We are also going to have to collectively take on the forces that are stealing our focus and compel them to change.

我们还必须共同应对那些窃取我们注意力的力量，并迫使他们做出改变。

The alternative to cruel optimism – telling people a simplistic story that sets them up to fail – isn't pessimism, the idea that you can't change anything. It's authentic optimism.

残酷乐观主义的另一种选择——告诉人们一个让他们失败的简单化故事——不是悲观主义，即你无法改变任何事情的想法。这是真正的乐观主义。

This is where you honestly acknowledge the barriers that stand in the way of your goal and establish a plan to work together with other people to dismantle those barriers, step by step.

在这里，您诚实地承认阻碍您实现目标的障碍，并制定计划与其他人一起努力逐步消除这些障碍。

Then I realised I was now left with a really difficult question. How, precisely, do we start to do that?

然后我意识到我现在面临一个非常困难的问题。确切地说，我们如何开始这样做呢？

The First Glimpses of the Deeper Solution

9

9 更深层次解决方案的初见

After learning so much about how our technology works, I was left with two clear and urgent questions. Firstly: what are the specific changes to this invasive tech that could be made, in practice, to prevent it harming our attention and focus?

在了解了我们的技术的工作原理之后，我留下了两个明确而紧迫的问题。首先：在实践中可以对这种侵入性技术进行哪些具体改变，以防止它损害我们的注意力和注意力？

And secondly: how do we compel these huge corporations to introduce these changes in the real world?

其次：我们如何迫使这些大公司在现实世界中引入这些变化？

Tristan and Aza – drawing on their own experiences, and the essential work of Professor Shoshana Zuboff – believe that if we are going to find a lasting solution, we need to go right to the root cause of the problem. That’s why, one morning, Aza said to me starkly: ‘We could just ban surveillance capitalism.’ I paused to try to process what he was saying.

特里斯坦和阿扎根据他们自己的经验以及 Shoshana Zuboff 教授的重要工作相信，如果我们要找到持久的解决方案，我们就需要直击问题的根源。这就是为什么有一天早上，阿扎直截了当地对我说：“我们可以禁

止监视资本主义。”我停下来试图理解他的话。

This would mean, he explained, that the government would ban any business model that tracks you online in order to figure out your weaknesses and then sells that private data to the highest bidder so they can change your behaviour.

他解释说，这意味着政府将禁止任何在线跟踪你的商业模式，以找出你的弱点，然后将私人数据出售给最高出价者，以便他们可以改变你的行为。

This model is, Aza says, ‘just fundamentally anti-democratic and anti-human’, and it has to go.

阿扎说，这种模式“从根本上来说是反民主和反人类的”，它必须被废除。

This sounded dramatic and frankly impossible when I first heard it, but Tristan and Aza explained that there are plenty of historical precedents for something becoming so widespread, only for society to discover it actually causes a lot of harm and ban the market in it.

当我第一次听到这个消息时，这听起来很戏剧性，坦率地说是不可能的，但特里斯坦和阿扎解释说，有很多历史先例可以让某些东西变得如此普遍，只是社会发现它实际上会造成很大的伤害并禁止它的市场。

Think about lead paint. It was in a majority of American homes – then it was discovered to damage the brains of kids and adults, making it harder for them to focus. As one of Tristan’s mentors, Jaron Lanier, pointed out to me, when we found that out, we didn’t say nobody could paint their homes ever again. We just banned the lead in the paint. Your home is still painted today – just with much better products. Or think about CFCs. As I mentioned before, when I was a child in the hairspray-obsessed 1980s, it was discovered that a substance in hairsprays was destroying the ozone layer that protects us from the sun’s rays. It terrified us all. We banned CFCs. We still have hairsprays, they just work differently, and today, the ozone layer is healing.

想想含铅油漆。它出现在大多数美国家庭中——后来发现它会损害儿童和成人的大脑，使他们更难集中注意力。正如特里斯坦的导师之一贾

伦·拉尼尔向我指出的那样，当我们发现这一点时，我们并没有说没有人可以再粉刷自己的房屋。我们刚刚禁止油漆中含有铅。今天，您的家仍在粉刷——只是使用了更好的产品。或者考虑一下 CFC。正如我之前提到的，当我还是个沉迷于发胶的 20 世纪 80 年代的孩子时，人们发现发胶中的一种物质正在破坏保护我们免受阳光照射的臭氧层。它吓坏了我们所有人。我们禁止使用氟氯化碳。我们仍然有发胶，只是它们的作用不同，而今天，臭氧层正在愈合。

There are all sorts of things that we have decided, as a civilised society, can't be bought and sold, like (for example) human organs.

作为一个文明社会，我们已经决定不能买卖各种各样的东西，例如人体器官。

So, I asked them, let's say we banned surveillance capitalism. What would happen to my Facebook and Twitter accounts the following day, the following week, the following year? 'I think they would have a crisis moment, in the same way that Microsoft had a crisis moment,' Aza told me. In 2001, Microsoft was ruled by the US government to have become a monopoly. That company reinvented itself, and now 'They're sort of like the benevolent adult in the room. I think the same transformation would happen to Facebook.'

所以，我问他们，假设我们禁止监视资本主义。第二天、下周、下一年我的 Facebook 和 Twitter 帐户会发生什么？“我认为他们会遇到危机时刻，就像微软也遇到危机时刻一样，”阿扎告诉我。2001年，微软被美国政府统治，成为垄断企业。那家公司重塑了自己，现在“他们有点像房间里仁慈的成年人”。我认为 Facebook 也会发生同样的转变。

In practice, the day after a ban, these companies would have to find different ways to fund themselves. There is one model that is obvious, and an alternative form of capitalism that everyone reading this will have some experience of – subscription.

实际上，禁令实施后的第二天，这些公司将不得不寻找不同的方式为自己筹集资金。有一个显而易见的模式，也是资本主义的另一种形式，每个读到这篇文章的人都会有一些经验——订阅。

Let's imagine each of us had to pay fifty cents or a dollar every month to use Facebook. Suddenly, Facebook would no longer be working for advertisers and offering up your secret wishes and preferences as their real product. No. It would be working for you.

让我们想象一下，我们每个人每月必须支付 50 美分或 1 美元才能使用 Facebook。突然之间，Facebook 将不再为广告商工作，也不再将你的秘密愿望和偏好作为他们的真实产品提供。不，它会对你有用。

Its job – for the first time – would be to actually figure out what makes you happy, and to give it to you – instead of figuring out what makes advertisers happy, and how they can manipulate you to give it to them.

它的工作——第一次——是真正弄清楚什么让你快乐，并将其提供给你——而不是弄清楚什么让广告商快乐，以及他们如何操纵你把它提供给他们。

So if, like most people, you want to be able to focus, the site would have to be redesigned to facilitate that. If you want to be socially connected, instead of isolated in front of your screen, it would have to figure out how to make that possible.

因此，如果您像大多数人一样希望能够集中注意力，则必须重新设计该网站以促进这一点。如果你想保持社交联系，而不是孤立在屏幕前，就必须弄清楚如何实现这一点。

There's another obvious way that these companies could survive, which is for them to be bought by the government and taken into public ownership. This would take social media out of the capitalist part of the economy.

这些公司还有另一种明显的生存方式，那就是政府收购它们并纳入公有制。这将使社交媒体脱离经济的资本主义部分。

This can sound drastic, but every single person reading this book benefits today, directly, from exactly the same model. We all agree we need to have sewers – they are an unavoidable necessity, unless we want to go back to the world of cholera outbreaks and faeces in the streets. So in virtually every country, the government owns, maintains and regulates the sewers, and even hardcore anti-government activists agree that this is a good use of state power.

这听起来可能很激烈，但今天每个阅读本书的人都直接从完全相同的模型中受益。我们都同意我们需要有下水道——它们是不可避免的必需

品，除非我们想回到霍乱爆发和街道上粪便的世界。因此，几乎在每个国家，政府都拥有、维护和管理下水道，甚至铁杆反政府活动人士也认为这是对国家权力的良好运用。

Using the same model, our governments could acknowledge that social media is now an essential public utility, and explain that when it is run according to the wrong incentives, it causes the psychological equivalents of cholera outbreaks.

使用相同的模型，我们的政府可以承认社交媒体现在是一种重要的公共事业，并解释说，当它根据错误的激励措施运行时，它会导致相当于霍乱爆发的心理后果。

It would be a bad idea for the government to run it – it's easy to imagine how authoritarian leaders could abuse that. Fortunately, there's a better option: you can have public ownership, independent of the government. In Britain, the BBC is owned and funded by the British public, and it is run in the interests of the British public – but its day-to-day running is independent of the government. It's not perfect, but this model works so well that it is the most respected media organisation in the world.

由政府来管理它是一个坏主意——很容易想象独裁领导人会如何滥用它。幸运的是，有一个更好的选择：你可以拥有独立于政府的公有制。在英国，BBC 由英国公众拥有和资助，其运营是为了英国公众的利益，但其日常运营独立于政府。它并不完美，但这种模式运作良好，以至于它成为世界上最受尊敬的媒体组织。

Once the financial incentives are changed – through subscription, or public ownership, or another model – then the nature of these sites can change, in ways we can actually begin to envision already.

一旦经济激励措施发生变化（通过订阅、公有制或其他模式），这些网站的性质就会发生变化，而我们实际上已经开始设想这种变化。

Aza told me that 'it's actually technically not hard' to redesign the major social-media sites so that, instead of trashing your attention span and our societies, they would be designed to heal them, once the financial incentives to do that are in place.

阿扎告诉我，重新设计主要社交媒体网站“实际上在技术上并不难”，这样一来，一旦经济激励措施到位，它们就不会破坏你的注意力和我们

的社会，而是能够治愈它们。。

This was difficult for me to grasp at first, so I asked what social media would look like after the changes they would like to see.

一开始我很难理解这一点，所以我问他们希望看到的改变之后社交媒体会是什么样子。

Tristan, Aza and others began by explaining minor changes, then built up to big changes, and then told me what has to happen to make any of these changes happen.

特里斯坦、阿扎和其他人首先解释了微小的变化，然后逐渐形成大的变化，然后告诉我必须发生什么才能使这些变化发生。

They started by talking about how these companies could, overnight, remove a lot of the aspects of these apps and sites that deliberately scramble our heads and keep us online longer than we really want.

他们首先讨论了这些公司如何在一夜之间删除这些应用程序和网站的许多方面，这些方面故意扰乱我们的头脑，让我们上网的时间比我们真正想要的要长。

Aza said: ‘For instance, Facebook tomorrow could start batching your notifications, so you only get one push notification a day ... They could do that tomorrow.’ (This was something Tristan had proposed in his explosive slide show back when he was still at Google.) So instead of getting ‘this constant drip of behavioural cocaine’, telling you every few minutes that somebody liked your picture, commented on your post, has a birthday tomorrow, and on and on and on – you would get one daily update, like a newspaper, summarising it all.

阿扎说：“例如，Facebook 明天可能会开始对你的通知进行批量处理，所以你每天只能收到一个推送通知.....他们明天就可以这样做。”（这是特里斯坦在他还在公司时在他的爆炸性幻灯片中提出的建议）谷歌。）所以，你不会得到“这种持续不断的行为可卡因滴注”，每隔几分钟告诉你有人喜欢你的照片，评论了你的帖子，明天过生日等等——你会收到每日更新，就像报纸一样，总结了一切。

You’d be pushed to look once a day, instead of being interrupted

several times an hour.

你会被迫每天看一次，而不是每小时被打断几次。

‘Here’s another one,’ he said. ‘Infinite scroll.’ That’s his invention, where when you get to the bottom of the screen, it automatically loads more and more, forever. ‘What’s going on there is it’s catching your impulses before your brain has a chance to really get involved and make a decision.’ Facebook and Instagram and the others could simply turn off infinite scroll – so that when you get to the bottom of the screen, you have to make a conscious decision to carry on scrolling.

“这是另一张，”他说。“无限滚动”。这是他的发明，当你到达屏幕底部时，它会自动加载越来越多的内容，永远。“发生的事情是，在你的大脑有机会真正参与并做出决定之前，它就抓住了你的冲动。”Facebook、Instagram 和其他公司可以简单地关闭无限滚动 - 这样，当你到达屏幕底部时，你必须有意识地决定继续滚动。

Similarly, these sites could simply switch off the things that have been shown to most polarise people politically, stealing our ability to pay collective attention. Since there’s evidence YouTube’s recommendation engine is radicalising people, Tristan told one interviewer: ‘Just turn it off.

同样，这些网站可以简单地关闭向大多数政治两极分化的人们展示的内容，从而窃取我们集体关注的能力。由于有证据表明 YouTube 的推荐引擎正在激化人们，特里斯坦告诉一位采访者：“把它关掉吧。”

They can turn it off in a heartbeat.’ It’s not as if, he points out, the day before recommendations were introduced, people were lost and clamouring for somebody to tell them what to watch next.

他们可以立即将其关闭。”他指出，在推出建议的前一天，人们并不迷失方向，大声要求有人告诉他们接下来要看什么。

Once the most obvious forms of mental pollution have been stopped, they said, we can begin to look deeper, at how these sites could be redesigned to make it easier for you to restrain yourself and think about your longer-term goals.

他们说，一旦停止了最明显的精神污染形式，我们就可以开始更深入地研究如何重新设计这些网站，以便让你更容易克制自己并思考你的长期目标。

‘It doesn’t take much work to start imagining what would be different interfaces,’ Aza said.

“开始想象不同的界面并不需要太多的工作，”阿扎说。

The most obvious example takes us back to where I started with Tristan, in our very first conversation: there could be a button that says ‘here are all your friends who are nearby and are indicating they’d like to meet up today’. You click it, you connect, you put down your phone and hang out with them. Instead of being a vacuum sucking up your attention and keeping it away from the outside world, social media would become a trampoline, sending you back into that world as efficiently as possible, matched with the people you want to see.

最明显的例子让我们回到了我和特里斯坦的第一次谈话中：可能有一个按钮，上面写着“这里是你在附近的所有朋友，表示他们想今天见面”。你点击它，你连接，你放下手机，和他们一起出去玩。社交媒体不再是吸走你的注意力并使其远离外界的真空中，而是成为一个蹦床，尽可能有效地将你送回那个世界，并与你想见的人相匹配。

Similarly, when you set up (say) a Facebook account, it could ask you how much time you want to spend per day or per week on the site. You might name ten minutes, or two hours – it’s up to you – and then the website could help you to achieve your goal.

同样，当您设置（例如）Facebook 帐户时，它可能会询问您每天或每周想在该网站上花费多少时间。您可以指定十分钟或两个小时 - 这取决于您 - 然后该网站可以帮助您实现目标。

One way could be that when you hit that limit, the website could radically slow down. In tests, Amazon found that even 100 milliseconds of delay in the pace at which a page loads results in a substantial drop-off in people sticking around to buy the product. Aza said: ‘It just gives your brain a chance to catch up to your impulse and [ask] – do I really want to be here?’

一种可能是，当您达到该限制时，网站速度可能会急剧减慢。在测试中，亚马逊发现，即使页面加载速度延迟 100 毫秒，也会导致购买该产品的人数大幅下降。阿扎说：“这只是让你的大脑有机会跟上你的冲动，并[问]——我真的想来这里吗？”

No.’

不。’

In addition, Facebook could ask you at regular intervals – what changes do you want to make to your life? Maybe you want to exercise more, or take up gardening, or become vegetarian, or start a heavy-metal band.

此外，Facebook 可以定期询问你——你想对你的生活做出哪些改变？也许你想多锻炼，或者从事园艺工作，或者成为素食主义者，或者组建一支重金属乐队。

It could then match you up with other people nearby – friends, or friends of friends, or interested strangers in your neighbourhood – who say they also want to make that change and have indicated they are looking for the equivalent of gym buddies.

然后，它可以将您与附近的其他人（朋友、朋友的朋友或您附近感兴趣的陌生人）匹配起来，他们说他们也想做出这种改变，并表示他们正在寻找相当于健身伙伴的人。

Facebook would become, Aza says, ‘a way of socially surrounding yourself with the behaviour that you want’. A battery of scientific evidence shows that if you want to succeed in changing something, you should meet up with groups of people doing the same.

阿扎说，Facebook 将成为“一种让你在社交环境中随心所欲地进行自己想要的行为的方式”。一系列科学证据表明，如果你想成功改变某些事情，你应该与一群做同样事情的人会面。

At the moment, they said, social media is designed to grab your *attention* and sell it to the highest bidder, but it could be designed to understand your *intentions* and to better help you achieve them. Tristan and Aza told me that it’s just as easy to design and program this life-affirming Facebook as the life-draining Facebook we currently have.

他们表示，目前社交媒体的目的是吸引你的注意力并将其卖给出价最高的人，但它也可以被设计为了解你的意图并更好地帮助你实现这些目标。特里斯坦和阿扎告诉我，设计和编程这个肯定生命的 Facebook 和我们目前拥有的耗尽生命的 Facebook 一样容易。

I think that most people, if you stopped them in the street and painted them a vision of these two Facebooks, would say they wanted the one that serves your intentions. So why isn't it happening? It comes back, Tristan and Aza said, to the business model.

我认为大多数人，如果你在街上拦住他们并向他们描绘这两个 Facebook 的愿景，他们会说他们想要一个符合你意图的那个。那么为什么它没有发生呢？特里斯坦和阿扎说，这又回到了商业模式。

If right now these social-media companies made the changes that you just read about, they would lose an enormous amount of money. Within the existing economic structure of the companies, they can't do the right thing by your attention span or the wider society.

如果现在这些社交媒体公司做出你刚刚读到的改变，他们将损失巨额资金。在公司现有的经济结构中，他们无法通过你的注意力范围或更广泛的社会来做正确的事情。

This – above everything else – is the rock-solid reason why you have to change the business model, if you want to change the way social media affects us.

如果你想改变社交媒体影响我们的方式，这就是你必须改变商业模式的最重要的原因。

The business model can only be changed by regulation imposed on these companies by governments, they said. Then the changes I just described would cease to be impossible threats to the bottom line and start to become very exciting ways to tempt subscribers.

他们表示，只有政府对这些公司实施监管才能改变商业模式。然后，我刚才描述的变化将不再是对底线的不可能的威胁，而是开始成为吸引订户的非常令人兴奋的方式。

At the moment there is a fundamental clash between your interests – to be able to focus, to have friends you see offline, to be able to discuss things calmly – and the interests of the social-media companies. With the introduction of a ban on surveillance capitalism and a move to a different business model, that clash ends. As Tristan put it, you'd be paying for the interests to be aligned between you and

the product you use. Suddenly that team of Silicon Valley engineers behind the screen wouldn't be working against you and your deeper intentions; they'd be working *for* you and trying to *serve* your deeper intentions.

目前，你的利益——能够集中注意力、拥有线下见到的朋友、能够平静地讨论事情——与社交媒体公司的利益之间存在着根本性的冲突。随着监视资本主义禁令的出台和转向不同的商业模式，这场冲突结束了。正如特里斯坦所说，你需要为你和你使用的产品之间的利益一致付出代价。突然之间，屏幕后面的硅谷工程师团队就不会与你和你更深层的意图相悖了；他们会为你工作并努力满足你更深层的意图。

One day, Aza said to me: 'The fundamental thing is that no one likes the way that they are spending time or making decisions with the way technology currently is. It's hard to get from that hill to this hill, because we have to go through a valley.'

有一天，阿扎对我说：“最根本的一点是，没有人喜欢他们用目前的技术方式花费时间或做出决策。从那座山到这座山很难，因为我们必须穿过一个山谷。

That's the role of regulation – to help making crossing that valley easier. But the hill on the other side is much, much nicer.'

这就是监管的作用——帮助人们更容易地跨越这个低谷。但另一边的山要好得多。”



I found so much of what Aza and Tristan had taught me persuasive – but I was wary about their argument that we need to use the law to stop these companies from continuing as they are. There were several reasons why. Firstly, I wondered if they were overstating the problem.

我发现阿扎和特里斯坦教给我的很多东西都很有说服力——但我对他们的论点持谨慎态度，他们认为我们需要利用法律来阻止这些公司继续现状。原因有几个。首先，我想知道他们是否夸大了这个问题。

When I spoke with Nir Eyal, he said: 'Every generation has these moral panics, where we only want to look at the negative sides' of an issue. He told me 'Tristan is reading, literally verbatim, from the 1950s about the comic-book debate,' when many people believed that

children were being made violent by a new wave of gory comics. In the 1950s, ‘People like Tristan went to the Senate and told the senators that comic books are turning children into addicted, hijacked [zombies] – literally, it’s the same stuff ... Today, we think of comic books as so innocuous.’

当我与尼尔·埃亚尔交谈时，他说：“每一代人都有道德恐慌，我们只想看到问题的消极面”。他告诉我，“特里斯坦正在逐字逐句地阅读 20 世纪 50 年代关于漫画书的争论”，当时许多人认为新一波的血腥漫画让孩子们变得暴力。在 20 世纪 50 年代，“像特里斯坦这样的人去参议院告诉参议员，漫画书正在把孩子变成上瘾的、被劫持的[僵尸]——从字面上看，这是同样的东西……今天，我们认为漫画书是如此无害。”

On this basis, he argues – and here he’s not alone – that the science that Tristan and Aza and other critics of the current tech business model draw on is incorrect. He believes that some of the social science I have drawn on in the past two chapters is garbled or wrong.

在此基础上，他认为（他并不孤单）特里斯坦和阿扎以及其他对当前科技商业模式的批评者所利用的科学是不正确的。他认为我在过去两章中引用的一些社会科学是乱码或错误的。

I’ll give you one detailed example, so you get a sense of this controversy. Tristan argues YouTube is radicalising people, based on an array of evidence I mentioned before. Nir responds by pointing to a recent study by the coder Mark Ledwich that suggested in fact, watching YouTube had a slightly *deradicalising* effect on its users. Tristan, in response, directs people towards the Princeton academic Professor Arvind Narayanan, and many other critics of this study, who say that the research Nir is citing here is worthless. Let’s go through this, step by step. The people who say YouTube radicalises you argue that this effect happens over time.

我给你举一个详细的例子，让你对这场争论有一个大概的了解。根据我之前提到的一系列证据，特里斯坦认为 YouTube 正在使人们变得激进。Nir 回应说，程序员 Mark Ledwich 最近的一项研究表明，事实上，观看 YouTube 对其用户产生了轻微的去激进化影响。作为回应，特里斯坦将人们引向普林斯顿大学学者阿温德·纳拉亚南教授和许多其他这项研究的批评者，他们说尼尔在这里引用的研究毫无价值。让我们一步步来看看。那些说 YouTube 让你变得激进的人认为，这种效应会随着时间的推移而发生。

You create a profile, you log in, and gradually YouTube builds up knowledge of your preferences, and to keep you watching, the content it feeds you gets more extreme. But the research Nir cites didn't study *any* logged-in users. All they did was go to a video on YouTube – say, Boris Johnson giving a speech – and without logging in, they looked at the recommendations that appeared along the side. If you use YouTube in this highly unusual way, the videos don't become more extreme over time, and it might be fair to say YouTube is deradicalising.

你创建一个个人资料，登录，YouTube 就会逐渐了解你的喜好，为了让你持续观看，它为你提供的内容会变得更加极端。但尼尔引用的研究并未研究任何登录用户。他们所做的只是观看 YouTube 上的视频（例如，鲍里斯·约翰逊发表演讲），无需登录，他们就查看旁边出现的推荐。如果您以这种极不寻常的方式使用 YouTube，这些视频不会随着时间的推移而变得更加极端，而且可以公平地说 YouTube 正在去激进化。

But huge numbers of YouTube users *do* log in. (We don't know exactly how many, because YouTube keeps that information secret.)

但确实有大量 YouTube 用户登录。（我们不知道具体有多少用户，因为 YouTube 对这些信息保密。）

For every conceivable way the tech companies could be screwing with us, there is a back-and-forth like this, with Tristan and Nir each citing rigorous social scientists who have reached opposing conclusions. Tristan draws on academics from Yale and New York University and Harvard; Nir draws on academics like Professor Andrew Przybylski at Oxford University, who agrees with Nir that Tristan's warnings are overheated. So what's happening? It's not that either of them is being disingenuous – it's that measuring the changes these sites are triggering is really complicated, and hard to figure out.

对于科技公司可能与我们搞砸的每一种方式，都会有这样的反复，特里斯坦和尼尔都引用了严格的社会科学家得出的相反结论。特里斯坦借鉴了耶鲁大学、纽约大学和哈佛大学的学者的经验；尼尔借鉴了牛津大学教授安德鲁·普尔兹比斯基（Andrew Przybylski）等学者的观点，他同意尼尔的观点，即特里斯坦的警告有些过激。那么发生了什么？这并不是说他们中的任何一个都不诚实，而是衡量这些网站引发的变化确实很复杂，而且很难弄清楚。

We have to be honest that we are making decisions based on a lot of uncertainty here. In the long sweep of history, there will likely be some areas where it turns out Nir is right, and some where Tristan is right. That still leaves us with a basic dilemma.

我们必须诚实地说，我们是在很多不确定性的基础上做出决定的。在漫长的历史长河中，可能会有一些领域证明尼尔是正确的，而另一些领域则证明特里斯坦是正确的。这仍然给我们留下了一个基本的困境。

Right now, we need to make choices about whether to let social-media companies continue behaving as they have been. We have to figure out the balance of risk.

现在，我们需要做出选择，是否让社交媒体公司继续像以前那样行事。我们必须弄清楚风险的平衡。

There are two things that helped me make up my mind about what I think we should do next. One was a thought experiment, and the other was hard evidence from inside Facebook itself.

有两件事帮助我下定决心下一步应该做什么。一个是思想实验，另一个是来自 Facebook 内部的确凿证据。

Let's imagine Nir is wrong, and we all follow his advice anyway – we allow surveillance capitalism to continue getting us ‘fiendishly hooked’, with only light regulation. Then let's imagine Tristan is wrong, and we all follow his advice anyway – we regulate the Big Tech companies to stop their invasive practices.

让我们想象尼尔是错的，无论如何我们都听从他的建议——我们允许监视资本主义继续让我们“疯狂地着迷”，而只有轻微的监管。那么让我们想象一下特里斯坦错了，无论如何我们都遵循他的建议——我们监管大型科技公司以阻止他们的入侵行为。

If Tristan is wrong and we still follow his advice, you would have been tricked into creating a world where you get targeted with a lot less advertising, you spend less, you get spied on less, and in return, you have to pay a small sum each month to subscribe to a few social-media companies, or those companies have in some way been taken over as public utilities run in our collective interests, like the sewers or the highways.

如果特里斯坦错了，而我们仍然听从他的建议，那么你就会被欺骗，

创造一个世界，在这个世界里，你的目标广告少得多，你花的钱更少，你受到的监视也更少，作为回报，你必须支付少量的费用。每个月订阅一些社交媒体公司，或者这些公司以某种方式被接管，因为公共事业是为了我们的集体利益而运营的，比如下水道或高速公路。

Now imagine if we did what Nir wants. What happens if he's wrong? What are we left with? Attention shrinks even more, political extremism expands, and the disturbing trends we see around us continue to rise.

现在想象一下，如果我们按照 Nir 的意愿去做。如果他错了怎么办？我们还剩下什么？注意力进一步萎缩，政治极端主义扩大，我们周围的令人不安的趋势继续上升。

The second thing that persuaded me was even more decisive. One day, in the spring of 2020, it was revealed what Facebook actually thinks about these questions, in private, when they think we will never be able to hear them.

说服我的第二件事更加果断。2020 年春天的一天，Facebook 私下里透露了对这些问题的真实想法，而他们认为我们永远听不到这些问题。

A large number of internal Facebook documents and communications were leaked to the *Wall Street Journal*. It turned out that behind closed doors, the company had responded to the claims that their algorithms had damaged our collective attention and helped the rise of Trump and Brexit by convening a team of some of their best scientists and tasking them with figuring out if this was really true, and if it was, to figure out what they could do about it. The unit was called Common Ground.

Facebook 的大量内部文件和通讯被泄露给《华尔街日报》。事实证明，该公司在闭门会议上回应了有关他们的算法损害了我们的集体注意力并帮助特朗普和英国脱欧的说法，召集了一个由一些最优秀的科学家组成的团队，并责成他们弄清楚这是否是事实。确实如此，如果是的话，弄清楚他们能做些什么。该单位被称为“共同点”。

After studying all the hidden data – the stuff that Facebook doesn't release to the public – the company's scientists reached a definite conclusion.

在研究了所有隐藏数据（Facebook 不向公众发布的数据）后，该公

司的科学家得出了明确的结论。

They wrote: ‘Our algorithms exploit the human brain’s attraction to divisiveness,’ and ‘if left unchecked’, the site would continue to pump its users with ‘more and more divisive content in an effort to gain user attention and increase time on the platform’.

他们写道：“我们的算法利用了人脑对分裂的吸引力”，“如果不加以控制”，该网站将继续向用户提供“越来越多的分裂内容，以吸引用户注意力并增加在平台上的时间”。

A separate internal Facebook team, whose work also leaked to the *Journal*, had independently reached the same conclusions. They found that 64 percent of all the people joining extremist groups were finding their way to them because Facebook’s algorithms were directly recommending them.

Facebook 的一个独立内部团队也独立得出了相同的结论，该团队的工作也被泄露给了《华尔街日报》。他们发现，在所有加入极端主义团体的人中，有 64% 是因为 Facebook 的算法直接推荐他们而找到了加入极端主义团体的途径。

This meant across the world, people were seeing in their Facebook feeds racist, fascist and even Nazi groups next to the words: ‘Groups You Should Join.’ They warned that in Germany, one-third of all the political groups on the site were extremist.

这意味着世界各地的人们在他们的 Facebook 动态中看到种族主义、法西斯主义甚至纳粹团体的字样旁边写着：“你应该加入的团体。”他们警告说，在德国，该网站上三分之一的政治团体是极端主义者。

Facebook’s own team was blunt, concluding: ‘Our recommendation systems grow the problem.’

Facebook 自己的团队直言不讳地得出结论：“我们的推荐系统加剧了这个问题。”

After carefully analysing all the options, Facebook’s scientists concluded there was one solution: they said Facebook would have to abandon its current business model. Because their growth was so tied up with toxic outcomes, the company should abandon attempts at

growth.

在仔细分析所有选项后，Facebook 的科学家得出结论，只有一个解决方案：他们表示 Facebook 将不得不放弃其当前的商业模式。由于它们的增长与不良结果密切相关，因此该公司应该放弃增长尝试。

The only way out was for the company to adopt a strategy that was ‘anti-growth’ – deliberately shrink, and choose to be a less wealthy company that wasn’t wrecking the world.

该公司唯一的出路是采取“反增长”战略——故意收缩，选择成为一家不那么富有、不会破坏世界的公司。

Once Facebook was shown – in plain language, by their own people – what they were doing, how did the company’s executives respond? According to the *Journal’s* in-depth reporting, they mocked the research, calling it an ‘Eat Your Veggies’ approach. They introduced some minor tweaks, but dismissed most of the recommendations. The Common Ground team was disbanded and has ceased to exist. The *Journal* reported dryly: ‘Zuckerberg also signalled he was losing interest in the effort to recalibrate the platform in the name of the social good ... asking that they not bring him something like that again.’ I read this and I thought of my friend Raull Santiago, in his favela in Rio, being terrorised by helicopters sent by the far-right government that was elected with the help of these algorithms – algorithms so powerful that Bolsonaro’s supporters responded to his victory by chanting, ‘Facebook! Facebook!’

一旦 Facebook 的员工用简单的语言向他们展示了他们正在做的事情，公司高管有何反应？据《华尔街日报》的深度报道，他们嘲笑这项研究，称其为“吃蔬菜”方法。他们进行了一些细微的调整，但驳回了大部分建议。Common Ground 团队已解散并且不复存在。《华尔街日报》干巴巴地报道道：“扎克伯格还表示，他对以社会公益的名义重新调整平台的努力失去了兴趣.....要求他们不要再给他带来类似的东西。”我读到这篇文章，我想到了我的朋友劳尔圣地亚哥在里约热内卢的贫民窟里，受到在这些算法的帮助下当选的极右翼政府派出的直升机的恐吓——算法如此强大，以至于博尔索纳罗的支持者通过高呼“Facebook！”来回应他的胜利。Facebook！’

I realised that if Facebook won’t change the fact that their algorithm unintentionally promotes fascism – that it promotes Nazism in Germany – they will never care about protecting your focus and

attention. These companies will never restrain themselves. The risks of letting them continue behaving the way they have are greater than the risks of overreacting. They have to be stopped. They have to be stopped by us.

我意识到，如果 Facebook 不改变他们的算法无意中宣扬法西斯主义的事实——它在德国宣扬纳粹主义——他们就永远不会关心保护你的焦点和注意力。这些公司永远不会克制自己。让他们继续按照自己的方式行事的风险比反应过度的风险更大。必须阻止他们。我们必须阻止他们。



I was daunted. For a while, I felt I had no idea how we could achieve such a goal. Many people go this far in the argument, and then sputter to a pessimistic halt.

我被吓到了。有一段时间，我觉得我不知道我们如何才能实现这样的目标。许多人争论到这里，然后就悲观地停止了。

They say – yes, this system is messing with us in terrible ways, but we'll just have to adjust, because nothing and nobody can stop it. We live in a culture where there is a sense of deep political fatalism at every turn. I saw this when I wrote my book about the war on drugs, *Chasing the Scream*, and I travelled all over the world talking about it. Especially in the US, I kept hearing: Yes, you're right that the drug war is a disaster and a failure. (Over 80 percent of Americans agree.) Yes, you're right that decriminalisation or legalisation would be better.

他们说——是的，这个系统正在以可怕的方式扰乱我们，但我们必须进行调整，因为没有任何东西、没有人可以阻止它。我们生活在一种处处充满深刻政治宿命论的文化中。当我写关于毒品战争的书《追逐尖叫》时，我看到了这一点，我走遍了世界各地谈论它。尤其是在美国，我不断听到：是的，你说得对，毒品战争是一场灾难和失败。（超过 80% 的美国人同意。）是的，你是对的，非刑事化或合法化会更好。

But no, it will never happen – so do you know a good lawyer or rehab facility for an addicted relative? Political pessimism keeps people trapped in a search for purely personal and individual solutions.

但不，这永远不会发生——那么你知道为吸毒成瘾的亲戚找一位好的律

师或康复机构吗？政治悲观主义使人们陷入寻求纯粹个人和个人解决方案的困境。

But here's the truth: this despair isn't just self-defeating; I think it's actually empirically wrong. I reminded myself – forces as powerful as the tech companies have been defeated many times in human history, and it always happens in the same way. It is when ordinary people form movements and demand something better, and they don't give up until they have achieved it.

但事实是：这种绝望不仅会弄巧成拙，还会弄巧成拙。我认为这实际上是错误的。我提醒自己——像科技公司这样强大的力量在人类历史上已经被击败过很多次，而且总是以同样的方式发生。当普通人发起运动并要求更好的东西时，他们不实现它就不会放弃。

I know that could sound vague or idealistic, so I want to give a very practical example of a change that happened in my family, and very likely in your family, in the past three generations.

我知道这听起来很模糊或理想化，所以我想举一个非常实际的例子，说明过去三代人中发生在我的家庭中的变化，很可能也发生在你的家庭中。

I am forty-one years old. My grandmothers were the age I am now in the year 1962. In that year, my Scottish grandmother, Amy McRae, was living in a working-class tenement in Scotland, and my Swiss grandmother, Lydia Hari, was living on a mountain in the Swiss Alps. Amy had been forced to leave school when she was thirteen, because nobody thought it was worth educating girls.

我今年四十一岁。我的祖母们的年龄与我现在的年纪是 1962 年。那一年，我的苏格兰祖母艾米·麦克雷 (Amy McRae) 住在苏格兰的一栋工人阶级公寓里，而我的瑞士祖母莉迪亚·哈里 (Lydia Hari) 则住在苏格兰的一座山上。瑞士阿尔卑斯山。艾米十三岁时被迫辍学，因为没有人认为值得教育女孩。

While her brother stayed in education, she was sent to work cleaning toilets, which she did all her working life. She had wanted to work with homeless people, but in practice women were locked out of jobs like that, and she was told to know her place as a woman and shut up.

当她的哥哥继续上学时，她被派去打扫厕所，她一生都在做这个工

作。她本来想与无家可归的人一起工作，但实际上，女性被排除在这样的之外，她被告知要知道自己作为女性的地位，然后就闭嘴了。

Lydia grew up in a Swiss village, and as a teenager she was constantly drawing and painting. She wanted to be an artist. She was told that girls couldn't be artists. She got married young, and was told to obey her husband.

莉迪亚在瑞士的一个村庄长大，十几岁的时候她就不断地画画。她想成为一名艺术家。有人告诉她女孩不能成为艺术家。她很早就结婚了，并被告知要服从丈夫。

I would sit in their kitchen years later, when her husband would hold out an empty mug and yell '*Kaffee!*' (coffee) and she was expected to scramble to fetch it. She would sometimes sketch, but she said it made her depressed, because it reminded her of what her life might have been.

几年后，我坐在他们的厨房里，当她丈夫拿着一个空杯子大喊“Kaffee！”（咖啡）时，她就会争先恐后地去拿它。她有时会画素描，但她说这让她感到沮丧，因为这让她想起自己的生活可能是什么样的。

My grandmothers lived in a society in which women were excluded from almost all systems of power and almost all choices about their lives. In 1962 there were no women in the British cabinet, the US cabinet or the Swiss government.

我的祖母生活在一个妇女被排除在几乎所有权力体系和几乎所有生活选择之外的社会。1962年，英国内阁、美国内阁或瑞士政府中都没有女性。

Women made up less than 4 percent of the members of British parliament and the US Senate, and less than 1 percent in Switzerland's Federal Assembly, where women weren't even allowed to vote in seventeen out of the country's twenty cantons (including the one where my grandmother lived).

在英国议会和美国参议院中，女性成员所占比例不到 4%，在瑞士联邦议会中女性比例也不足 1%，在该国 20 个州中，有 17 个州甚至不允许女性投票（其中包括我祖母住过）。

This meant that the rules were written by men for men. American and British women were banned from getting mortgages or opening bank accounts unless they were married and had written permission from their husbands. Swiss women were banned from getting jobs at all without the written permission of their spouse.

这意味着规则是由男人为男人制定的。美国和英国妇女被禁止获得抵押贷款或开设银行账户，除非她们已婚并得到丈夫的书面许可。未经配偶书面许可，瑞士妇女根本无法找到工作。

There were no domestic-violence shelters anywhere on earth, and it was legal everywhere for a man to rape his wife.

世界上任何地方都没有家庭暴力庇护所，男人强奸妻子在任何地方都是合法的。

(When, in the 1980s, there were moves to ban rape within marriage, one California Assembly member objected, saying, ‘But if you can’t rape your wife, who can you rape?’) In practice, men could beat their wives, because the police did not regard this as a crime, and they could molest their daughters, since it was so taboo to speak out about this that nobody ever went to the police to report it.

（在 20 世纪 80 年代，当出现禁止婚内强奸的举措时，一位加州议员表示反对，他说：“但是如果你不能强奸你的妻子，你还能强奸谁呢？”）实际上，男人可以殴打他们的妻子，因为警察不认为这是犯罪，他们可以猥亵他们的女儿，因为谈论这件事是一种禁忌，所以没有人去警察局报案。

As I type out those facts, I keep thinking about my fifteen-year-old niece. Like her great-grandmother, she loves to draw and paint, and every time I see her doing it, I think of Lydia, doing the same thing in her Swiss village eighty-five years before.

当我打出这些事实时，我一直在想着我十五岁的侄女。像她的曾祖母一样，她喜欢画画，每次我看到她这样做，我都会想起莉迪亚，八十五年前在她的瑞士村庄里做着同样的事情。

Lydia was told to stop wasting her time and start serving men. My niece is told: You’re going to be a great artist – let’s start looking at art

schools.

莉迪亚被告知不要再浪费时间了，开始为男人服务。我的侄女被告知：你将成为一名伟大的艺术家 - 让我们开始考虑艺术学校。

My niece never met my grandmother, but I believe that Lydia would have been happy to know the ways in which feminism changed the world.

我的侄女从未见过我的祖母，但我相信莉迪亚会很高兴知道女权主义如何改变世界。

I know it's exceptionally irritating for a male to mansplain this topic in this way, especially when so much sexism and misogyny remains, and when women still face huge barriers.

我知道对于男性来说，以这种方式谈论这个话题是非常令人恼火的，特别是当性别歧视和厌女症依然存在，而女性仍然面临巨大的障碍时。

I know the advance of women's rights is far from won, and many of the advances that have been made are under threat.

我知道妇女权利的进步还远未取得胜利，而且许多已经取得的进步都受到威胁。

I know only one thing here that is definitely true: the difference between the lives of my grandmothers and the life of my niece is a stunning achievement, and it happened for one reason, and one reason only.

我只知道一件事是绝对正确的：我祖母的生活和我侄女的生活之间的差异是一项惊人的成就，它的发生有一个原因，而且只有一个原因。

There was an organised movement of ordinary women who banded together and fought for it, and continued fighting even when it was really hard.

普通妇女发起了一场有组织的运动，她们联合起来并为之奋斗，即使在非常困难的情况下也继续奋斗。

There are, of course, many differences between the fight for feminism and the fight for our focus. But nonetheless, I kept returning

to this example in my mind for a very basic reason.

当然，为女权主义而战和为我们的焦点而战之间存在许多差异。但尽管如此，出于一个非常基本的原因，我不断地在脑海中回想起这个例子。

The feminist movement teaches us that huge and seemingly immovable forces can be challenged by ordinary people – and that when they do, it can lead to real change. The concentrated power of men in 1962 was vastly greater than the power of Big Tech as I write this in 2021. Men controlled almost everything – every parliament, every corporation, every police force – and they had for as long as those institutions had existed.

女权运动告诉我们，普通人可以挑战巨大且看似不可动摇的力量——而当它们挑战时，就能带来真正的改变。当我在 2021 年写下这篇文章时，1962 年男性的集中权力远远大于大型科技公司的力量。男性几乎控制了一切——每个议会、每个公司、每支警察部队——只要这些机构存在，他们就控制着一切。

It would have been very easy, in that situation, to say – nothing can change; give up; women will just have to learn to live a life of subordination. Many people are tempted to think that now, when they contemplate the huge forces stealing our focus.

在那种情况下，很容易说——没有什么可以改变；一切都改变不了。放弃；女人只需要学会过一种从属的生活。现在，当许多人想到巨大的力量正在夺走我们的注意力时，他们很容易这么想。

But that's the thing about the pessimistic belief that we are powerless and can't change anything. It's false.

但这就是悲观信念的问题，即我们无能为力，无法改变任何事情。这是假的。

Think about another historical example. I'm gay. In 1962, I would have been put in jail for it. Now I can get married. Homophobia ruled for 2,000 years, and then it didn't.

想想另一个历史例子。我是同性恋。1962 年，我可能会因此入狱。现在我可以结婚了。恐同症统治了 2000 年，然后就没有了。

The difference – the only difference – was a movement of ordinary people demanding an end to the forces thwarting their lives. I am free because the people who came before us didn't give up; they got up.

区别——唯一的区别——是普通民众要求结束阻碍他们生活的力量的运动。我是自由的，因为在我们之前的人没有放弃；他们站了起来。

Again, of course, there's big differences between the struggle for equality for gay people, and this fight. But there is a key parallel: no source of power, no set of ideas, is so large it can't be challenged.

当然，为同性恋者争取平等的斗争和这场斗争之间存在着巨大的差异。但有一个关键的相似之处：没有任何权力来源、任何想法都大得无法受到挑战。

Big Tech would love us to believe that their power is impregnable and there's no point fighting for change because that never works. These companies are as fragile as every other powerful force that was torn down in the end.

大型科技公司希望我们相信他们的力量是坚不可摧的，并且没有必要为变革而奋斗，因为这永远不会奏效。这些公司和其他最终被摧毁的强大力量一样脆弱。

If we don't form a movement and fight, what is the alternative? Tristan and Aza warned me that right now, we are only at the start of what unregulated surveillance capitalism will do to us. It is only going to become more sophisticated and more invasive. They gave me lots of examples. Here's one. There's a technology that exists called 'style transfer'. If you use it, you can show a computer lots of paintings by Van Gogh and then you point it at a new scene, and it can recreate it in the style of Van Gogh. Aza told me how 'style transfer' could quite soon be used against you or me: 'Google today could read all of your Gmail, come up with a model that can mimic your style, and then sell that to an advertiser. [You, as the user] don't even know what's going on,' but you will start to receive emails that are unusually welcoming and persuasive, because they sound just like you.

如果我们不发起运动、不斗争，还有什么选择呢？特里斯坦和阿扎警告我，现在，不受监管的监视资本主义对我们造成的影响才刚刚开始。它只会变得更加复杂和更具侵入性。他们给了我很多例子。这是一个。

有一种技术叫做“风格转移”。如果你使用它，你可以向计算机展示大量梵高的画作，然后你将它指向一个新场景，它可以以梵高的风格重新创建它。阿扎告诉我，“风格转移”很快就会被用来对付你或我：“今天的谷歌可以读取你所有的 Gmail，提出一个可以模仿你风格的模型，然后将其卖给广告商。”[你，作为用户]甚至不知道发生了什么，”但你会开始收到异常热情和有力度的电子邮件，因为它们听起来就像你一样。

Even worse, in Aza's opinion, 'they could look at all of your Gmail, look at all the emails you responded to quickly and positively, and learn that style. So [they] learn the style that is uniquely persuasive to you. There is nothing illegal about that. There are no laws to protect you against that. Is it breaking your privacy?

更糟糕的是，在阿扎看来，“他们可以查看你所有的 Gmail，查看你快速、积极回复的所有电子邮件，并学习这种风格。”所以[他们]学习对你来说独特有说服力的风格。这并不违法。没有法律可以保护您免受这种情况的侵害。它侵犯了你的隐私吗？

They're not selling your data. They're just selling an asymmetric knowledge about how you work – even more than you know about yourself – to the highest bidder.'

他们不会出售您的数据。他们只是向最高出价者出售关于你如何工作的不对称知识，甚至比你对自己的了解还要多。

It's an asymmetry so extreme that it will hack vulnerabilities you don't even know are vulnerabilities. There are technological innovations coming that will make the current forms of surveillance capitalism look as crude as Space Invaders looks to a kid raised on Fortnite. Facebook, in 2015, filed a patent for technology that will be able to detect your emotions from the cameras on your laptop and phone.

这种不对称性如此极端，以至于它会破解你甚至不知道是漏洞的漏洞。即将到来的技术创新将使当前的监视资本主义形式看起来像《太空入侵者》对于在《堡垒之夜》中长大的孩子来说一样粗糙。Facebook 于 2015 年申请了一项技术专利，该技术将能够通过笔记本电脑和手机上的摄像头检测你的情绪。

If we don't regulate, Aza warns, 'Our supercomputers are going to test their way to finding all our vulnerabilities, without anyone ever

stopping to ask – is that right?

阿扎警告说，如果我们不进行监管，“我们的超级计算机将测试自己的方法来发现我们所有的漏洞，而没有人停下来问——是吗？

It'll feel to us a little bit like we're still making our own decisions,' but it will be 'a direct attack against agency and free will'.

我们会觉得有点像我们仍在做出自己的决定”，但这将是“对机构和自由意志的直接攻击”。

Tristan's mentor, Jaron Lanier – a veteran Silicon Valley engineer – told me he used to be a consultant for loads of dystopian Hollywood movies, like *Minority Report*, but he had to stop because he kept designing ever-more-frightening technologies to warn people of what was coming – and designers kept responding by saying: that's so cool; how do we make that?

特里斯坦的导师贾伦·拉尼尔（Jaron Lanier）是一位资深的硅谷工程师，他告诉我，他曾经是《少数派报告》等大量反乌托邦好莱坞电影的顾问，但他不得不停下来，因为他不断设计出越来越可怕的技术来警告人们：接下来会发生什么——设计师们不断地回应说：这太酷了；我们如何做到这一点？

'Sometimes I hear people say it's too late to make certain changes to the web or platforms or digital technology,' James Williams told me. But the axe, he said, existed for 1.4 million years before anybody thought to put a handle on it. The web, by contrast, 'is less than ten thousand days old'.

“有时我听到人们说现在对网络、平台或数字技术进行某些改变已经太晚了，”詹姆斯·威廉姆斯告诉我。但他说，这把斧头已经存在了 140 万年，才有人想到要给它加把柄。相比之下，网络“诞生还不到一万天”。

We are, I realised, in a race. To one side there is the rapidly escalating power of invasive technologies, which are figuring out how we work and fracturing our attention.

我意识到，我们正在一场竞赛。一方面，侵入性技术的力量正在迅速增强，这些技术正在弄清楚我们的工作方式并分散我们的注意力。

On the other side there needs to be a movement demanding technologies that work for us, not against us; technologies that feed

our ability to focus, instead of fracturing it. At the moment, the movement for humane technology consists of a few brave people like Professor Shoshana Zuboff, Tristan and Aza. They are the equivalent of the scattered bands of brave feminists of the early 1960s. We all need to decide – are we going to join them and put up a fight? Or are we going to let the invasive technologies win by default?

另一方面，需要有一场运动，要求技术为我们服务，而不是对我们不利；技术可以增强我们的专注能力，而不是破坏它。目前，人道技术运动由一些勇敢的人组成，如 Shoshana Zuboff 教授、Tristan 和 Aza。她们相当于 20 世纪 60 年代初期勇敢的女权主义者分散的群体。我们都需要做出决定——我们要加入他们并进行斗争吗？或者我们会默认让侵入性技术获胜吗？

Cause Eight: The Surge in Stress and How It Is Triggering Vigilance

10

10 原因八：压力激增及其如何引发警惕

When I first admitted to myself I had an attention problem and fled to Provincetown, I had a simple story about what happened to my focus – the internet and cellphones broke it.

当我第一次承认自己有注意力问题并逃到普罗温斯敦时，我有一个关于我的注意力发生了什么的简单故事——互联网和手机打破了它。

I now knew that this was too simplistic – that the business model behind the tech was more important than the tech itself – but I was about to learn something even more important.

我现在知道这太简单了——技术背后的商业模式比技术本身更重要——但我即将学到一些更重要的东西。

These technologies arrived in our lives at a moment when we were unusually vulnerable to being hijacked by them – when our collective immune system was down, for reasons that are totally separate from the technology and its design.

这些技术出现在我们的生活中，当时我们非常容易被它们劫持——当我们的集体免疫系统出现故障时，其原因与技术及其设计完全无关。

At some level, many of us can sense some of the reasons for this. In early 2020 I decided to team up with the Council for Evidence-Based Psychiatry, and together we commissioned YouGov – one of the world's leading polling companies – to carry out (so far as I can tell) the first scientific opinion poll ever conducted into attention, in both the US and Britain.

在某种程度上，我们许多人都能感觉到其中的一些原因。2020年初，我决定与循证精神病学委员会合作，我们共同委托世界领先的民意调查公司之一 YouGov 进行（据我所知）有史以来第一次科学民意调查受到美国和英国的关注。

The poll identified people who felt their attention was getting worse, and then it asked them why they believed this was happening. It gave them ten options to choose from, and asked them to select any and all that they felt applied to them.

该民意调查确定了那些感觉自己的注意力越来越差的人，然后询问他们为什么相信这种情况正在发生。它给了他们十个选项供选择，并要求他们选择任何他们认为适用于他们的选项。

The number-one reason people gave for their problems was not their phones. It was stress, which was chosen by 48 percent. The number-two reason was a change in life circumstances, like having a baby or getting older, also chosen by 48 percent. The number-three problem was difficult or disturbed sleep, which was named by 43 percent. Phones came fourth, chosen by 37 percent.

人们提出问题的首要原因不是手机。48% 的人选择了压力。位居第二的原因是生活环境的变化，例如生孩子或变老，也有 48% 的人选择这样做。第三大问题是睡眠困难或睡眠障碍，43% 的人提到了这一问题。手机排名第四，有 37% 的人选择。

When I started to study the science of this in more detail, I learned that the hunches of ordinary people are not wrong. There are deeper forces than our phones and the web at work – and those forces led us, in turn, to develop a dysfunctional relationship with the web.

当我开始更详细地研究这方面的科学时，我发现普通人的预感并没有错。除了我们的手机和网络之外，还有比我们的手机和网络更深层的力量在起作用——而这些力量反过来又导致我们与网络建立了一种功能失调的关系。

I began to understand the first dimension of this when I spent time with the woman who later became the Surgeon General of California, who has made a key breakthrough on these questions. Of all the people I met for this book, she is perhaps the one I most admire.

当我与后来成为加州外科医生的一位女士相处时，我开始理解这个问题的第一个维度，她在这些问题上取得了关键突破。在我为这本书认识的所有人中，她也许是最敬佩的一个。

At first, when you read her story, it might like seem the situation she is describing is so extreme that it doesn't have much to do with your own life – but stick with me, because what she discovered can help us to understand a force that is fracturing the attention of many of us.

起初，当你读到她的故事时，你可能会觉得她所描述的情况是如此极端，以至于与你自己的生活没有太大关系——但请坚持下去，因为她的发现可以帮助我们理解这种力量正在分散我们许多人的注意力。



In the 1980s, in the suburbs of Palo Alto in California, a young Black girl named Nadine felt anxious as she made her way home from school. She loved her mother – her mom had taught her some ferocious moves on the tennis court, and she was always telling Nadine to get herself an education, because once you have it, nobody can take it away from you.

20 世纪 80 年代，在加利福尼亚州帕洛阿尔托郊区，一位名叫纳丁 (Nadine) 的年轻黑人女孩在放学回家的路上感到焦虑。她爱她的母亲——她的妈妈教了她一些网球场上的凶猛动作，她总是告诉纳丁要让自己接受教育，因为一旦你拥有了它，没有人可以把它从你身边夺走。

But there were times when – through no fault of her own – her mother behaved very differently. ‘The problem was,’ Nadine wrote later, ‘that we never knew which mother we were going to get.’

但有时，她母亲的行为却大不相同，这并不是她自己的错。 “问题是，”纳丁后来写道，“我们永远不知道我们会得到哪位母亲。”

Every day after school it was a guessing game – are we coming home to happy Mom or scary Mom?’

每天放学后，这都是一场猜谜游戏——我们回家看到的是快乐的妈妈还是可怕的妈妈？

Two decades later, Dr Nadine Burke Harris looked at the two children sitting in front of her in her examination room and felt something in her body – an old, familiar ache.

二十年后，纳丁·伯克·哈里斯医生在检查室里看着坐在她面前的两个孩子，感觉到身体里有某种东西——一种古老的、熟悉的疼痛。

The kids were seven and eight years old, and a few hours before, their father had pulled them into his car, deliberately failed to put on their seatbelts, and driven off, until he found a wall. Then he aimed his car at it and drove forward as fast as he could.

孩子们分别是七岁和八岁，几个小时前，他们的父亲把他们拉进车里，故意不系安全带，然后开走了，直到他发现了一堵墙。然后他将车子对准了它，以最快的速度向行驶。

Nadine watched the kids and thought about how afraid they must have been. ‘I knew intuitively what that type of fear felt like,’ she told me when we sat together. ‘I could empathise on a physiological level, if that makes any sense. I know what happens in those moments.’ These children, it turned out, also had a parent with paranoid schizophrenia.

纳丁看着孩子们，想着他们一定有多害怕。当我们坐在一起时，她告诉我，“我凭直觉知道那种恐惧是什么感觉。”“如果这有意义的话，我可以在生理层面上产生共鸣。我知道那些时刻会发生什么。”事实证明，这些孩子的父母也患有偏执型精神分裂症。

Nadine had coped with her mother’s mental illness by always being an A student, just as her mom, in her healthier moments, had taught her to. She got into Harvard, and then she studied public health and paediatrics.

纳丁一直以优秀的学生的身份应对母亲的精神疾病，正如她母亲在她健康的时候教她的那样。她进入哈佛大学，然后学习公共卫生和儿科。

When it came to making a decision about what to do with everything she had learned, she realised she wanted to help children.

当她决定如何利用所学到的一切时，她意识到自己想帮助孩子们。

While many of her classmates went on to provide medicine for rich people, Nadine went to Bayview, one of the last non-gentrified parts of San Francisco, which is a really poor, struggling neighbourhood with a lot of violence.

当她的许多同学继续为富人提供药品时，纳丁去了湾景，这是旧金山最后一个非中产阶级化的地区之一，这是一个非常贫穷、陷入困境的社区，暴力事件频发。

Not long after she started there, Nadine was with some friends when she heard a cracking sound. She ran towards it, and found a seventeen-year-old boy who had been shot and was bleeding out.

开始工作后不久，纳丁和一些朋友在一起，突然听到破裂的声音。她跑向那里，发现一名十七岁的男孩中弹，流血不止。

She learned that grandmothers in her new neighbourhood sometimes slept in their bathtubs because they were afraid of stray bullets hitting them in their sleep. She reflected later on what it's like to live in the middle of random violence like this all the time.

她了解到，她的新邻居的祖母有时会睡在浴缸里，因为她们害怕流弹在睡梦中击中她们。她后来反思了一直生活在这样的随机暴力之中是什么感觉。

To live in Bayview, she realised, was to constantly soak up fear and stress.

她意识到，住在湾景就需要不断吸收恐惧和压力。

One day, a fourteen-year-old boy who had been diagnosed with ADHD, who I'll call Robert, was brought to see Nadine. (I have also changed some other details throughout this chapter, at Nadine's request, to protect the medical confidentiality of her patients.) For a while, Robert had been prescribed the stimulant drug Ritalin, but it didn't seem to be making any difference for him. He said he didn't like how it made him feel, and he wanted to stop, but his previous doctors had insisted that he carry on taking it at higher and higher doses.

有一天，一名被诊断患有多动症的十四岁男孩（我称之为罗伯特）被带去见纳丁。（应纳丁的要求，我还更改了本章中的一些其他细节，以保护患者的医疗机密。）有一段时间，罗伯特服用了兴奋剂利他林，但这似乎没有任何区别为了他。他说他不喜欢这给他带来的感觉，他想停止服用，但他以前的医生坚持要求他继续服用越来越高的剂量。

Nadine asked Robert and his mother when his attention problems had first begun. It was when he was ten. She asked: what happened then? Well, they explained, that was when he was sent to live at his dad's house.

纳丁问罗伯特和他的母亲他的注意力问题是什么时候开始出现的。那是他十岁的时候。她问：然后发生了什么？嗯，他们解释说，那是他被送到他父亲家里住的时候。

They talked about the divorce, and the boy's life in general – and then Nadine asked gently: why was Robert sent to live with his dad? It took a while for them to tell the story, but in fits and starts, it tumbled out.

他们谈论了离婚，以及男孩的一般生活——然后纳丁温柔地问：为什么罗伯特被送去和他父亲住在一起？他们花了一段时间才把这个故事讲出来，但断断续续地就讲完了。

Robert's mother had a boyfriend, and one day when she came home, she found him in the shower, sexually abusing her son. She had been sexually abused all throughout her own childhood, and she had been groomed to be terrified of abusive men and to submit to their demands. In that moment, she felt powerless – so she did something she was deeply ashamed of.

罗伯特的母亲有一个男朋友，有一天她回家时发现他正在淋浴，正在性虐待她的儿子。她在整个童年时期都受到过性虐待，她从小就被培养成害怕虐待男人并屈服于他们的要求。那一刻，她感到无能为力，于是她做了一件令她深感羞愧的事情。

Instead of calling the police, she sent her son away to live with his dad. Whenever Robert came back to visit, his abuser was still there, waiting.

她没有报警，而是把儿子送去和他父亲住在一起。每当罗伯特回来探望时，施虐者仍然在那里等待。

Nadine thought a lot about this case, and she began to wonder if it might connect to a wider problem she was seeing.

纳丁对这个案例思考了很多，她开始怀疑这是否可能与她所看到的更广泛的问题有关。

When she arrived at the medical centre in Bayview, she had noticed that the kids there were being diagnosed as having attention problems at a staggering rate – dramatically higher than in wealthier neighbourhoods – and that the first and usually only response was to drug them with very powerful stimulants like Ritalin or Adderall. Nadine is a believer in the power of medication to solve all sorts of problems – it's why she went into medicine – but she started to wonder: what if we are misdiagnosing the problem a lot of these kids are facing?

当她到达湾景的医疗中心时，她注意到那里的孩子被诊断出患有注意力问题的比例惊人，远高于富裕社区，而第一个也是通常唯一的反应就是给他们注射非常强的药物。强力兴奋剂，如利他林或阿得拉。纳丁相信药物能够解决各种问题——这就是她进入医学领域的原因——但她开始想知道：如果我们误诊了许多孩子面临的问题怎么办？

Nadine knew that decades before, scientists had discovered something significant. When human beings are in a terrifying environment – like a war zone – we often flip into a different state. She gave me an example, one I briefly referred to a little earlier.

纳丁知道，几十年前，科学家们已经发现了一些重要的东西。当人类处于可怕的环境中时——比如战区——我们经常会陷入不同的状态。她给了我一个例子，我之前简单提到过这个例子。

Imagine that you are walking in the woods and you are confronted by a grizzly bear that looks like it's angry and about to attack you. In that moment, your brain stops worrying about what you're going to eat that night, or how you're going to pay the rent.

想象一下，您正在树林里散步，遇到一只灰熊，它看起来很生气，准备攻击您。在那一刻，你的大脑不再担心那天晚上要吃什么，或者如何支付房租。

It becomes narrowly and entirely focused on one thing: danger. You

track every movement of the bear, and your mind starts scanning for ways to get away from it. You become highly vigilant.

它变得狭隘而完全专注于一件事：危险。你追踪熊的每一个动作，你的大脑开始寻找逃离它的方法。你变得高度警惕。

Now imagine that these bear attacks happen a lot. Imagine if three times a week, an angry bear suddenly appeared on your street and swiped one of your neighbours. If this happened, you would likely develop a state known as ‘hypervigilance’. You would start to look out for danger all the time – whether there’s a bear right in front of you or not. Nadine explained to me: ‘Hypervigilance is essentially when you’re looking out for the bear around every corner.

现在想象一下这些熊的袭击发生了很多次。想象一下，如果一周三次，一只愤怒的熊突然出现在你的街道上并袭击了你的一个邻居。如果发生这种情况，您可能会进入一种称为“过度警惕”的状态。你会开始时刻警惕危险——无论你面前是否有熊。纳丁向我解释说：“高度警惕本质上是当你在每个角落寻找熊时。

Your attention is focused on cues for potential danger, as opposed to being focused on being present with what’s going on, or the lesson you’re supposed to be learning, or doing the work you were supposed to be doing. It’s not that [people in this state are] not paying attention.

你的注意力集中在潜在危险的线索上，而不是专注于正在发生的事情，或者你应该学习的课程，或者做你应该做的工作。这并不是说[这个州的人们]不注意。

It’s that they’re paying attention to any cues or signs of threat or danger in their environment. That is where their focus is.’

他们正在关注环境中任何威胁或危险的线索或迹象。这就是他们的重点所在。

She pictured Robert sitting in a classroom trying to learn math, but knowing that in a few days he will be seeing the man who sexually abused him and might do it again. How, Nadine wondered, could he bring the power of his mind to bear on sums in these circumstances?

她想象罗伯特坐在教室里试图学习数学，但知道几天后他将见到性虐待他的男人，并且可能会再次这样做。纳丁想知道，在这种情况下，他

怎样才能发挥自己的思维能力来计算呢？

It was primed instead to do one thing – to detect danger. This wasn't a failing in his brain – it was a natural and necessary response to intolerable circumstances.

相反，它准备做一件事——检测危险。这并不是他大脑的缺陷——这是对无法忍受的情况的自然而必要的反应。

She wanted to know how many of the kids she was treating, who were being told they had some inherent defect, might in fact be in a position like this. With the team at her clinic, she decided to scientifically investigate this question.

她想知道有多少她正在治疗的孩子，被告知他们有一些先天缺陷，实际上可能处于这样的境地。她决定与诊所的团队一起科学地研究这个问题。

She began to read the relevant scientific studies, and she learned that there was a standard way to identify if a child has been traumatised, and by how much. It's named the Adverse Childhood Experiences Study. It's quite straightforward. It asks: Have you experienced any of these ten bad things in your childhood – factors like physical abuse, cruelty and neglect? Then it asks about any problems you might be having now – like obesity, addiction and depression.

她开始阅读相关的科学研究，并了解到有一个标准方法可以识别孩子是否受到过创伤以及受到了多少创伤。它被命名为“不良童年经历研究”。这非常简单。它询问：您在童年时期是否经历过这十件不好的事情中的任何一件——例如身体虐待、残忍和忽视？然后它会询问您现在可能遇到的任何问题，例如肥胖、成瘾和抑郁。

Nadine decided her team was going to study all of the more than 1,000 children in their care in this way, to figure out how much childhood trauma they had experienced, and to see if that correlated with any of the other problems they might be having – including headaches, abdominal pains, and (crucially) attention problems. With every child, they went through this detailed assessment.

Nadine 决定她的团队将以这种方式研究他们照顾的所有 1,000 多名儿童，弄清楚他们经历了多少童年创伤，并看看这是否与他们可能遇到

的任何其他问题相关 -包括头痛、腹痛和（至关重要的）注意力问题。他们对每个孩子都进行了详细的评估。

Children who had experienced four or more types of trauma were 32.6 *times* more likely to have been diagnosed with attention or behaviour problems than children who had not experienced any trauma. Other scientists across the US have backed up the broad finding that kids are far more likely to have problems focusing if they experience trauma.

经历过四种或以上创伤的儿童被诊断出注意力或行为问题的可能性是没有经历过任何创伤的儿童的 32.6 倍。美国各地的其他科学家也支持了一项广泛的发现，即如果孩子经历过创伤，他们更有可能出现注意力不集中的问题。

For example, Dr Nicole Brown, in a separate body of research, found that childhood trauma tripled the development of ADHD symptoms. A large study by the British Office of National Statistics found that if there's a financial crisis in the family, a child's chances of being diagnosed with attention problems go up 50 percent. If there's a serious illness in the family, it goes up 75 percent.

例如，妮可·布朗博士在另一项研究中发现，童年创伤使多动症症状的发展增加了两倍。英国国家统计局的一项大型研究发现，如果家庭出现财务危机，孩子被诊断出注意力问题的几率会增加 50%。如果家里有重病，这个数字就会上升75%。

If a parent has to make a court appearance, it goes up nearly 200 percent. This evidence base is small, but it is growing, and it seems to broadly back up what Nadine found in Bayview.

如果家长必须出庭，费用会上涨近 200%。这个证据基础很小，但它正在增长，而且似乎广泛支持纳丁在湾景的发现。

She believed she had uncovered a key truth about focus: to pay attention in normal ways, you need to feel safe.

她相信自己已经发现了关于专注的一个关键事实：要以正常方式集中注意力，你需要感到安全。

You need to be able to switch off the parts of your mind that are scanning the horizon for bears or lions or their modern equivalents,

and let yourself sink down into one secure topic. In Adelaide, in Australia, I met with a child psychiatrist named Dr Jon Jureidini who has specialised in this question, and he told me that narrowing your focus is ‘a really good strategy in a safe environment, because it means you can learn things and flourish and develop.

你需要能够关掉大脑中那些正在扫描地平线寻找熊、狮子或它们现代同类的部分，让自己沉浸在一个安全的话题中。在澳大利亚阿德莱德，我遇到了一位名叫乔恩·朱雷迪尼（Jon Jureidini）博士的儿童精神病学家，他专门研究这个问题，他告诉我，缩小你的注意力是“在安全的环境中一个非常好的策略，因为这意味着你可以学习东西并蓬勃发展。

But if you are in a dangerous environment, selective attention [where you focus on just one thing] is a really dumb strategy. What you need instead is to evenly spread vigilance around your environment, looking for cues for danger.’

但如果你处于危险的环境中，选择性注意力（只专注于一件事）是一种非常愚蠢的策略。相反，你需要的是在你的环境中均匀地提高警惕，寻找危险的线索。

After she learned this, Nadine realised that with Robert, the response by his previous doctors had been a serious error. She told me: ‘Guess what? Ritalin does not treat sexual assault.’ For these kids, ‘The medications are treating the surface symptoms and not the root cause ... If a child is having horrific behaviour, most of the time, it’s the child’s really great way of alerting the system that something is not right.’ She came to believe that when children can’t pay attention, that’s often a signal that they are under terrible stress.

得知此事后，纳丁意识到，对于罗伯特来说，他以前的医生的反应是一个严重的错误。她告诉我：“你猜怎么着？利他林不能治疗性侵犯。”对于这些孩子来说，“这些药物只是治疗表面症状，而不是根本原因……如果孩子有可怕的行为，大多数时候，这是孩子向系统发出警报的好方法。她开始相信，当孩子们无法集中注意力时，这通常是他们承受巨大压力的信号。

Jon, the doctor in Adelaide who specialised in this subject, told me: ‘If you’re medicating a child in that situation, you’re colluding with them remaining in a violent or unacceptable situation.’ One study compared children who had been sexually abused with a group of children the

same age who hadn't been abused, and found that the sexual-abuse survivors had double the usual rate of diagnosable ADHD.

乔恩是阿德莱德专门研究这一问题的医生，他告诉我：“如果你在这种情况下给孩子用药，那么你就是在与他们串通一气，让他们继续处于暴力或不可接受的境地。”一项研究比较了遭受过性行为的儿童。与一群同龄但未受虐待的儿童一起受到虐待，发现性虐待幸存者的可诊断多动症比率是通常的两倍。

(This is not the only cause of ADHD – I'll come to the others later.)

(这不是多动症的唯一原因——我稍后会讨论其他原因。)

The approach that was taken to Robert can lead to horrendous outcomes. In Norway, I went to interview the politician Inga Marte Thorkildsen, who started to investigate these questions – and wrote a book about it – after she was shaken by the case of one of her constituents. He was an eight-year-old boy whose teachers identified him as showing all the signs of hypervigilance. He wouldn't sit still; he was running around all the time; he refused to do what he was told. So he was diagnosed with ADHD, and given stimulants. Not long afterwards he was found dead, with a seventeen-centimetre gap in his skull.

对罗伯特采取的方法可能会导致可怕的结果。在挪威，我采访了政治家英加·玛尔特·托基尔森(Inga Marte Thorkildsen)，她在被一名选民的案件震惊之后，开始调查这些问题，并写了一本相关的书。他是一个八岁的男孩，老师认为他表现出过度警惕的所有迹象。他不会坐以待毙；他一直在跑来跑去；他拒绝按照吩咐去做。于是他被诊断出患有多动症，并服用兴奋剂。不久之后，他被发现死亡，头骨上有一个十七厘米的缺口。

He had been murdered by his father, who, it emerged, had been violently abusing him all along. When I sat with her in Oslo, Inge told me: 'Nobody did anything because they just said, wow, he has problems with attention, blah blah.

他是被他的父亲谋杀的，而他的父亲一直以来都对他进行暴力虐待。当我在奥斯陆和她坐在一起时，英格告诉我：“没有人采取任何行动，因为他们只是说，哇，他注意力有问题，等等。”

They didn't even talk to him during [the period when he was being given] medication.'

在他接受药物治疗期间，他们甚至没有和他说话。

Nadine began to ask, If that is the wrong approach, what's the right way to respond? How could she help Robert, and all the other kids in her care like him?

纳丁开始问，如果这是错误的做法，那么正确的回应方式是什么？她怎样才能帮助罗伯特以及她照顾的所有其他像他一样的孩子呢？

She told me that she starts by explaining to parents: 'I believe this [inability to focus] is being caused by your [child's] body making too many stress hormones. So here's how we fix them. We have to create an environment. We have to limit the amount of scary or stressful things that your [child] is experiencing and witnessing. And we have to layer on lots of buffering, lots of caregiving, lots of nurturing.

她告诉我，她首先向父母解释：“我相信这种[无法集中注意力]是由于你[孩子]的身体产生过多的压力荷尔蒙造成的。”下面是我们解决这些问题的方法。我们必须创造一个环境。我们必须限制您的[孩子]经历和目睹的可怕或有压力的事情的数量。我们必须提供大量的缓冲、大量的照顾、大量的培育。

In order for you to be able to do that, you, Mom, have to recognise and address your own history of what's gone on in your life.'

为了让你能够做到这一点，妈妈，你必须认识并解决你自己生活中所发生的事情的历史。

There's no point saying this if you can't then offer them practical ways to do it. So she worked really hard to get funding from Bay Area philanthropists so that she could turn this proposal into a reality.

如果你不能为他们提供实用的方法，那么说这些就没有意义。因此，她非常努力地从湾区慈善家那里获得资金，以便将这个提议变成现实。

In a case like Robert's, Nadine explained, there are lots of steps that have to be taken. They had to help the mother get therapy, so she could understand why she felt powerless to challenge his abuser.

纳丁解释说，在像罗伯特这样的情况下，必须采取很多步骤。他们必须帮助这位母亲接受治疗，这样她才能理解为什么她感到无力挑战施虐者。

They had to connect the family with legal help so they could get a restraining order on the abuser, so he was out of Robert's life for ever. They had to prescribe yoga for both the abused child and mother, so they could reconnect with their bodies. They had to help them to improve their sleep and their nutrition.

他们必须为这家人寻求法律帮助，这样他们才能获得对施虐者的限制令，这样他就永远消失在罗伯特的生活中了。他们必须为受虐待的孩子和母亲开设瑜伽课程，以便他们能够与自己的身体重新建立联系。他们必须帮助他们改善睡眠和营养。

Nadine told me that you have to 'scale the tools that you offer to be the same scale as the problems folks are having'. These deeper solutions are, she stressed, really hard work – but she has seen them transform children.

纳丁告诉我，你必须“调整你提供的工具的规模，使其与人们遇到的问题的规模相同”。她强调，这些更深层次的解决方案确实是一项艰苦的工作，但她已经看到它们改变了孩子们。

'I think it's easy for people to hear that when you've experienced childhood trauma, you're broken or damaged,' but in reality, 'we have an ability to change.' She sees it all the time in her practice: 'The number of kids who have gone from failing to honour roll when they have the right diagnosis and the right support is nuts.' That's why, for her, this is 'joyful work', because 'it shows us the profound potential for change.

“我认为人们很容易听到，当你经历过童年创伤时，你就会破碎或受损，”但实际上，“我们有能力改变。”她在实践中一直看到这一点：“当有正确的诊断和正确的支持时，有多少孩子从失败变成光荣榜，这真是太疯狂了。”这就是为什么对她来说，这是“快乐的工作”，因为“它向我们展示了变革的巨大潜力。”

That's what I see in my clinical practice. This is eminently treatable. It's nuts how treatable it is.

这就是我在临床实践中所看到的。这是非常可以治疗的。它是多么容易治疗，真是太疯狂了。

And there's so much low-hanging fruit.' She believes that if we work hard enough to inform people, 'We're going to get there: we're going to get to the place where we've transformed the landscape of how society and medicine – all of us – respond to this issue.'

而且有很多唾手可得的成果。”她相信，如果我们足够努力地告诉人们，“我们就会到达那里：我们将会到达一个地方，我们已经改变了社会的面貌和医学——我们所有人——对这个问题做出回应。



Nadine believes she can only do this work because of the scared child she was in the suburbs of Palo Alto all those years before. She told me: 'There's a Buddhist saying – be grateful for your suffering, because it allows you to empathise with the suffering of others.'

纳丁认为，她只能做这项工作，因为多年前她在帕洛阿尔托郊区是一个害怕的孩子。她告诉我：“佛教有句俗话——感恩自己的痛苦，因为它让你能够同情他人的痛苦。”

Not long before I saw her last, Nadine had just been appointed Surgeon General of California, the most senior medical position in the state. But as prestigious and powerful as that is, she told me she is more proud of something else.

就在我最后一次见到她之前不久，纳丁刚刚被任命为加州卫生局局长，这是该州最高级别的医疗职位。但尽管如此，她告诉我，她对其他事情更感到自豪。

She had recently met with Robert and his mother. She saw how – as a result of the extensive help they have been given – they were slowly changing. He was no longer drugged for attention problems, nor was he showing difficulty focusing. They were developing empathy for each other. They were healing at a deep level, in a way that drugging the child could never have achieved. Robert's mother was able to see how her own sexual abuse had left her unable to protect her own child, and she was able, for the first time in her life, to see herself differently – and to have compassion for herself. This in turn meant she could start to have compassion for her son. They are both, Nadine

said, ‘recognising how the story can unfold differently’ from now on.

她最近见过罗伯特和他的母亲。她看到，由于给予了他们广泛的帮助，他们正在慢慢改变。他不再因为注意力问题而被麻醉，也没有表现出注意力不集中的困难。他们逐渐对彼此产生了同理心。他们正在深层愈合，这是给孩子下药永远无法达到的效果。罗伯特的母亲能够看到自己的性虐待如何导致她无法保护自己的孩子，她一生中第一次能够以不同的方式看待自己，并对自己产生同情心。这反过来意味着她可以开始同情她的儿子。纳丁说，他们俩都“认识到从现在开始故事会如何以不同的方式展开”。



Nadine could see that the severe trauma that Robert experienced had been devastating, but she also came to believe that ordinary life in Bayview – with all the stress that entails – corrodes attention.

纳丁可以看出罗伯特所经历的严重创伤是毁灭性的，但她也开始相信湾景的平凡生活——以及随之而来的所有压力——会腐蚀注意力。

Her patients who weren’t being abused as kids were still worried a lot of the time about being evicted, or going hungry, or being shot. They were under constant low-level pressure.

她的病人虽然小时候没有受到虐待，但很多时候仍然担心被驱逐、挨饿或被枪杀。他们一直承受着低水平的压力。

When she explained this to me, I wanted to understand – do other forms of stress affect attention? How about ones that are vastly less harrowing than sexual abuse? I found that the scientific evidence on this is a little bit complicated.

当她向我解释这一点时，我想了解——其他形式的压力会影响注意力吗？那些比性虐待少得多的痛苦又如何呢？我发现这方面的科学证据有点复杂。

The evidence in labs shows if you are put under mild-to-moderate stress, you will perform *better* on some tasks that require attention in the short term. We’ve all had that experience: before I go on stage to give a speech, I feel a surge of pressure, but it makes me wake up, pull myself together, and perform at my best.

实验室的证据表明，如果您处于轻度至中度的压力下，您在一些短期

内需要注意的任务上会表现得更好。我们都有过这样的经历：上台演讲之前，我感到一股压力，但它让我清醒过来，振作起来，发挥出最好的水平。

But what if that stress is protracted? In those circumstances, even mild levels of stress ‘can significantly alter attentional processes’, as one scientific team found in a typical study.

但如果这种压力持续存在怎么办？在这种情况下，正如一个科学团队在一项典型研究中发现的那样，即使是轻微的压力也会“显著改变注意力过程”。

The science is so clear on this that a recent summary explained: ‘It is now obvious that stress can cause structural changes in the brain with long-term effects.’

科学对此非常清楚，以至于最近的一份总结解释道：“现在很明显，压力会导致大脑的结构变化，并产生长期影响。”

I started to ask – why would this be? One reason is that stress often triggers other problems that we know undermine attention. For example, Professor Charles Nunn, a leading evolutionary anthropologist, investigated the rise of insomnia, and found that we struggle to sleep when we experience ‘stress and hyper-vigilance’. If you don’t feel safe, then you’ll be unable to wind down, because your body is saying to you – you’re in danger; stay alert.

我开始问——为什么会这样？原因之一是压力经常引发其他我们知道会削弱注意力的问题。例如，著名进化人类学家查尔斯·纳恩教授研究了失眠症的发病率，发现当我们经历“压力和高度警惕”时，我们会难以入睡。如果你感觉不安全，那么你将无法放松下来，因为你的身体正在对你说：你正处于危险之中；保持警惕。

So the inability to sleep, he explained, isn’t a malfunction – it’s ‘an adaptive trait, under circumstances of perceived threat’. To really deal with insomnia, Charles concluded we ‘need to alleviate the sources of the anxiety and stress to effectively treat insomnia.’ They have to get to grips with the causes.

因此，他解释说，无法入睡并不是一种故障，而是“在感知到威胁的情况下的一种适应性特征”。查尔斯总结说，要真正解决失眠问题，我们“需要减轻焦虑和压力的根源，才能有效治疗失眠。”他们必须抓住原

因。

What might those deeper causes be? Here's one. Six out of every ten US citizens have less than \$500 in savings for if a crisis comes along, and many other countries in the Western world are moving in the same direction. As a result of big structural changes in the economy, the middle class is collapsing. I wanted to understand: what happens to your ability to think clearly when you become more financially stressed? I learned that this has been studied carefully by Sendhil Mullainathan, professor of computational science at the University of Chicago. He was part of a team that studied sugarcane harvesters in India.

这些更深层次的原因可能是什么？这是一个。每 10 个美国公民中就有 6 个的储蓄不足 500 美元，以应对危机的发生，而西方世界的许多其他国家也正在朝着同样的方向前进。由于经济发生重大结构性变化，中产阶级正在崩溃。我想了解：当你的经济压力更大时，你清晰思考的能力会发生什么变化？我了解到芝加哥大学计算科学教授 Sendhil Mullainathan 对此进行了仔细研究。他是研究印度甘蔗收割机的团队的一员。

They tested their thinking skills before the harvest (when they were broke), and after the harvest (when they had a fair bit of money).

他们在收获前（当他们破产时）和收获后（当他们有相当多的钱时）测试了他们的思维能力。

It turned out that when they had the financial security that came at the end of the harvest, they were on average thirteen IQ points smarter – an extraordinary gap. Why would that be? Anyone reading this who's ever been financially stressed knows part of the answer instinctively.

事实证明，当他们在收获结束时获得财务保障时，他们的智商平均高出十三点——这是一个非凡的差距。为什么会这样呢？任何读过这篇文章、曾经面临过经济压力的人都会本能地知道部分答案。

When you are worried about how to survive financially, everything – from a broken washing machine to a child's lost shoe – becomes a threat to your ability to get through the week. You become more vigilant, just like Nadine's patients.

当你担心如何在经济上生存时，一切——从坏了的洗衣机到孩子丢了的鞋子——都会对你度过这一周的能力构成威胁。你变得更加警惕，就像纳丁的病人一样。

As I studied this big cause of stress, I kept thinking about something Nadine said to me: you have to ‘scale the tools that you offer to be the same scale as the problems folks are having’. I wondered: what would this mean if we applied it to our financial stress?

当我研究压力的这个重要原因时，我一直在思考纳丁对我说的话：你必须“调整你提供的工具，使其与人们遇到的问题保持一致”。我想知道：如果我们将其应用于我们的财务压力，这意味着什么？

It turns out there is a place that answered that very question. In Finland in 2017, a coalition government, consisting of both centrist and right-wing parties, decided to try an experiment. Every now and then, politicians and citizens across the world have suggested that we should give everyone a small guaranteed basic income every month. The government would say to you: we’re giving you a small amount of money to cover the basics (food, housing, heat), but no more. You don’t have to do anything for it – we just want you to be secure and have the basic minimum necessary to survive.

事实证明，有一个地方可以回答这个问题。2017年，芬兰由中间派和右翼政党组成的联合政府决定尝试一项实验。世界各地的政治家和公民时不时地建议我们每个月应该为每个人提供少量的有保障的基本收入。政府会对你说：我们给你少量的钱来支付基本费用（食物、住房、取暖），但仅此而已。您无需为此做任何事情 - 我们只是希望您安全并拥有生存所需的最低限度的基本资源。

This idea has been mooted by everyone from Republican President Richard Nixon to the Democratic presidential candidate Andrew Yang.

从共和党总统理查德·尼克松到民主党总统候选人安德鲁·杨，所有人都曾提出过这个想法。

Finland decided to stop talking and actually try it.

芬兰决定停止空谈，实际尝试一下。

They selected 2,000 of their citizens at random, aged between twenty-five and fifty-eight, and told them: for the next two years, every

month, we're going to give you 560 euros (which is about \$650 US, or £500), no strings attached.

他们随机选择了 2000 名年龄在 25 岁到 58 岁之间的公民，并告诉他们：在接下来的两年里，每个月，我们将给你们 560 欧元（约合 650 美元，或英镑）。500），没有任何附加条件。

The government set up alongside it a rigorous scientific programme to see what happened next, and once the project was over, the results were published. I interviewed two of the lead scientists who worked on it: Olavi Kangas, who is a professor in the Department of Social Research at the University of Turku, and Dr Signe Jauhilinen, and they talked me through their findings.

政府同时制定了严格的科学计划，看看接下来会发生什么，项目结束后，结果就会公布。我采访了两位从事该研究的主要科学家：图尔库大学社会研究系教授奥拉维·坎加斯（Olavi Kangas）和西涅·贾希利宁（Signe Jauhilinen）博士，他们向我讲述了他们的发现。

Olavi told me that when it came to attention and focus, 'the differences were very significant' – once people received a basic income, their ability to focus improved significantly.

奥拉维告诉我，当谈到注意力和集中力时，“差异非常显著”——一旦人们获得基本收入，他们集中注意力的能力就会显著提高。

Signe said they couldn't figure out the exact reason why, but they found that 'problems with money are really not good for concentration ... If you have to worry about your financial situation ... it takes a lot of the capacity of your brain.

西格纳说，他们无法找出确切的原因，但他们发现“金钱问题确实不利于集中注意力……如果你不得不担心自己的财务状况……这会占用你大量的大脑容量。”

If you don't have to worry, then it improves your capacity to think about other things.'

如果你不必担心，那么它会提高你思考其他事情的能力。

What the guaranteed basic income seems to have done – even though it was quite small – is give the recipients a sense they were

standing on stable ground at last. How many people in the world feel that at the moment?

保障基本收入的作用——尽管数额相当小——似乎让接受者感觉他们终于站稳了脚跟。此刻世界上有多少人有这样的感觉？

Anything that reduces stress improves our ability to pay deep attention. Finland showed that a universal basic income – enough to give a baseline of security, but not so much that it disincentivises work – improves people’s focus by dealing with one of the causes of our hypervigilance.

任何减轻压力的事情都会提高我们集中注意力的能力。芬兰表明，全民基本收入——足以提供安全基线，但又不会抑制工作积极性——通过解决导致我们过度警惕的原因之一，提高人们的注意力。

This made me think again about our problems with our phones and with the web.

这让我再次思考我们的手机和网络问题。

The internet arrived for most of us in the late 1990s, into a society where the middle class was starting to crumble, and where financial insecurity was rising, and we were sleeping an hour less than people did in 1945. A more stressed society will be less able to resist distractions.

对我们大多数人来说，互联网是在 20 世纪 90 年代末出现的，当时的社会中，中产阶级开始崩溃，财务不安全感不断加剧，我们的睡眠时间比 1945 年的人们少了一个小时。一个压力更大的社会将是不太能够抵抗干扰。

It would always have been hard to resist the sophisticated human-hacking of surveillance capitalism, but it appeared we were already getting weaker, and we were easier to hack than we would have been otherwise. I was about to investigate other causes that also made us increasingly vulnerable.

监视资本主义的复杂的人类黑客攻击总是很难抗拒，但我们似乎已经变得越来越弱，而且我们比其他情况下更容易被黑客攻击。我正打算调查其他也让我们变得越来越脆弱的原因。

I want to be honest here about something that complicates the argument I am putting forward in this book. There's one way in which what Nadine had to teach me – and the wider science of stress that I learned later – is a challenge to the broader thrust of what I'm writing here.

我想诚实地谈论一些使我在本书中提出的论点变得复杂的事情。纳丁必须教给我的东西——以及我后来学到的更广泛的压力科学——在某种程度上是对我在这里写的更广泛主旨的挑战。

As you saw in the introduction, I believe it is reasonable to argue that our attention problems are getting worse, even though we don't have any long-term studies tracking changes in people's ability to focus over time.

正如您在引言中所看到的，我认为有理由认为我们的注意力问题正在变得越来越严重，尽管我们没有任何长期研究来跟踪人们注意力随时间变化的能力。

I came to this conclusion because we can prove that there are several factors that damage focus and attention, and those factors are rising.

我得出这个结论是因为我们可以证明有几个因素会损害注意力，而且这些因素正在增加。

But there's one counterargument to that. You might ask: what if there are countervailing trends, happening at the same time, which make our attention better? Nadine has shown that experiencing violence damages your ability to focus. But over the past century, there has been a big fall in violence in the Western world. I know this runs contrary to what we read in the news, but it's true – Professor Stephen Pinker, in his book *The Better Angels of Our Nature*, lays out the evidence for this very clearly. This seems counterintuitive, in part because we are constantly fed images of violent and threat on television and the web, but it is a fact that you are far less likely to be violently attacked or murdered than your ancestors.

但对此有一个反驳。您可能会问：如果同时出现相反的趋势，使我们的注意力更加集中怎么办？纳丁已经证明，经历暴力会损害你的注意力。但在过去的一个世纪里，西方世界的暴力事件大幅减少。我知道这与我们在新闻中读到的相反，但这是事实——斯蒂芬·平克教授在他的

《人性中的更好的天使》一书中非常清楚地列出了这一点的证据。这似乎违反直觉，部分原因是我们不断地在电视和网络上看到暴力和威胁的图像，但事实是，你比你的祖先更不可能受到暴力攻击或谋杀。

Not very long ago, the whole world – in terms of violence and fear – looked more like Bayview, or worse.

不久前，整个世界——就暴力和恐惧而言——看起来更像湾景城，甚至更糟。

The threat of being beaten up or killed is surely the largest source of stress any person can face. Since that has fallen, we would expect this trend to have *improved* attention and focus. I want to be candid about this fact.

被殴打或杀害的威胁无疑是任何人可能面临的巨大压力来源。由于这一数字有所下降，我们预计这一趋势将得到改善。我想坦白地说明这个事实。

Do I think this sole – but highly significant – trend improving our focus outweighs all the other factors dragging it down? Does it outweigh the effects of a huge increase in switching, a decline in sleep, the effects of vast machinery of surveillance capitalism, the rise in financial insecurity? I think – on balance – it doesn't. But this isn't something we can put into a computer and crunch the numbers on – it's too hard to quantify and compare each of these effects. So reasonable people could disagree with me.

我是否认为这个唯一但非常重要的趋势改善了我们的注意力，超过了所有其他拖累它的因素？它是否超过了转换大幅增加、睡眠减少、监视资本主义庞大机制的影响以及金融不安全感加剧的影响？我认为——总的来说——事实并非如此。但这不是我们可以输入计算机并计算数字的东西——量化和比较这些影响太困难了。所以理性的人可能会不同意我的观点。

It is possible that Nadine's evidence suggests our attention, as a society, should be improving.

纳丁的证据可能表明，作为一个社会，我们的注意力应该得到改善。

But I then learned about another attention-wrecking force in our culture – one that has been rising throughout my lifetime.

但随后我了解到了我们文化中另一种令人注意力分散的力量——这种力量在我的一生中一直在崛起。



As a culture, in the Western world, we work longer with each decade that passes. Ed Deci, a professor of psychology who I interviewed at the University of Rochester in upstate New York, has shown that an extra month per year has been tacked on to what, in 1969, was considered a full-time job.

作为一种文化，在西方世界，我们的工作时间每过去十年就更长。我在纽约州北部罗切斯特大学采访过的心理学教授埃德·德西（Ed Deci）表示，在 1969 年被视为全职工作的基础上，每年多工作一个月。

As the twenty-first century began, the Canadian health service decided to study how people in their country spent their time at work.

二十一世纪初，加拿大卫生服务部门决定研究该国人们如何度过工作时间。

They studied over 30,000 people in over one hundred workplaces – public and private, large and small – and they ended up producing some of the most detailed research anywhere on how we work. They explained that as work hours swell and swell, people get more distracted and less productive, and concluded: ‘These workloads are not sustainable.’

他们对 100 多个工作场所（公共和私人、大大小小的）的 30,000 多人进行了研究，最终对我们的工作方式进行了一些最详细的研究。他们解释说，随着工作时间越来越长，人们会更加分心，工作效率也会降低，并得出结论：“这些工作量是不可持续的。”

I only understood the full implications of this for our attention when I went to two places that had experimented with ways to radically reduce the amount of stress people experience at work.

当我去了两个地方尝试从根本上减少人们在工作中经历的压力时，我才明白这对我们的注意力的全部影响。

They are 10,000 miles apart, and their experiments are quite different – but I believe they have big implications for how we could reverse

the damage that is being done to our attention today.

他们相距 10,000 英里，他们的实验也截然不同——但我相信它们对于我们如何扭转今天对我们注意力造成的损害具有重大意义。

The Places That Figured Out How to Reverse the Surge in Speed and Exhaustion

11

11 个找到了扭转速度和疲劳激增的方法的地方

Andrew Barnes never stopped. He was working in the City of London – Britain's Wall Street – in the aftermath of the financial sector being deregulated in 1987. So companies could really let rip, and there was an explosion of financial swagger, with men in suits yelling at each other across the floor of the Stock Exchange as they traded billions.

安德鲁·巴恩斯从未停止过。1987 年金融业放松管制后，他在伦敦金融城（英国的华尔街）工作。因此，公司可以真正放手，金融界的狂妄自大爆发，穿着西装的男人在对面互相吼叫。他们的交易额达数十亿美元。

In this world, you were a wimp if you arrived later than 7.30 a.m., and you were a fool if you left before 7.30 p.m. So for half of the year, Andrew woke up in the dark and arrived home in the dark. He missed feeling the sun on his face.

在这个世界上，如果你在早上7.30之后到达，你就是一个懦夫；如果你在晚上7.30之前离开，你就是一个傻瓜。就这样，有半年的时间，安德

鲁在黑暗中醒来，在黑暗中回到家。他怀念阳光照在脸上的感觉。

In the City, everyone believed working better meant working more, until work consumed your whole life. He moved between various ball-breaking corporations.

在这座城市，每个人都相信工作得更好意味着工作得更多，直到工作耗尽了你的一生。他在各个不同的破坏性公司之间流动。

At one of them, all the new employees were called in on their first day to find that on the table in front of them there was a pre-typed resignation letter.

其中一家公司，所有新员工第一天被叫进来时，发现面前的桌子上有一封预先打印好的辞职信。

They were ordered to sign it, and they were told: if you ever displease the boss, we'll pull out this letter, and you will be out. Andrew slowly realised that he hated this exhausting existence.

他们被命令在上面签字，并被告知：如果你让老板不高兴，我们就会把这封信拿出来，然后你就会被开除。安德鲁慢慢意识到他讨厌这种疲惫的存在。

'If I look back, I sacrificed my twenties on the altar of ambition, and later in life, I probably sacrificed my family,' he told me.

“如果我回想起来，我在野心的祭坛上牺牲了我的二十多岁，在以后的生活中，我可能牺牲了我的家庭，”他告诉我。

His wild overwork 'cost me some relationships along the way', and it was only many years later that 'I'm now having to build relationships with my kids.'

他的过度劳累“让我失去了一些人际关系”，直到很多年后，“我现在不得不与我的孩子们建立关系。”

Andrew left England for Australia and New Zealand, where over time he became really successful, rising to own a series of large businesses.

安德鲁离开英国前往澳大利亚和新西兰，随着时间的推移，他在那里取得了真正的成功，逐渐拥有了一系列大型企业。

When I went to see him, we met in his penthouse apartment looking out over the city of Auckland – but the memory of those sunless years in the City of London never left him.

当我去看他时，我们在他的顶层公寓见面，俯瞰着奥克兰市——但在伦敦金融城那些没有阳光的岁月的记忆从未离开过他。

One day, in 2018, he was on a plane when he happened to see a report in a business magazine about research into productivity at work. It contained some figures that intrigued him.

2018 年的一天，他在飞机上偶然看到商业杂志上的一篇关于工作效率研究的报道。其中包含一些令他感兴趣的数字。

The average British worker, the research had found, was only actually engaged with their job for less than three hours a day. This meant that most of the time people were at work, they were mentally checked out.

研究发现，英国工人平均每天真正投入工作的时间不到三个小时。这意味着人们在工作的大部分时间里都会受到精神检查。

They were in the office for a lot of hours, with their lives passing them by, but they weren't getting much done.

他们在办公室待了很长时间，日子一天天过去，但他们并没有做多少事情。

Andrew kept thinking about this. The company he ran in New Zealand, named Perpetual Guardian, had over a dozen offices employing over 240 people, in a business that drew up wills and ran and managed trusts. He wondered if these poor productivity figures applied to his own staff. In this situation, everyone is losing out.

安德鲁一直在思考这个问题。他在新西兰经营的公司名为 Perpetual Guardian，拥有十几个办事处，雇用了 240 多名员工，从事起草遗嘱、经营和管理信托的业务。他想知道这些糟糕的生产力数据是否也适用于他自己的员工。在这种情况下，每个人都处于亏损状态。

The workers are bored and distracted and worried about other things, particularly the families they don't get to see as much as they should. At the same time, the employer isn't getting a workforce that's focused on the task in hand.

工人们感到无聊、心烦意乱，还担心其他事情，尤其是他们不能经常见到的家庭。与此同时，雇主没有找到专注于手头任务的员工。

At the back of Andrew's mind, there was a memory of the years he himself had worked in a dysfunctional way, and he felt his own focus and judgement had been thrown off.

在安德鲁的脑海深处，有一段关于他自己多年来以一种不正常的方式工作的记忆，他觉得自己的注意力和判断力已经被抛开了。

So one day he asked himself: what if I changed my entire company so that from now on, every employee worked only four days a week, for the same wages?

所以有一天，他问自己：如果我改变整个公司，从现在开始，每个员工每周只工作四天，工资不变，结果会怎样？

It would free up time for them to rest, have a proper social life, and to be with their families – the things they are often trying to squeeze into the cracks of their work time.

这将为他们腾出时间休息、享受适当的社交生活以及与家人在一起——这些是他们经常试图在工作时间里挤出来的事情。

What if giving them all this meant that, in return, the workers were able to focus on their tasks for just forty-five minutes more a day? His back-of-the-envelope calculations suggested to him that, in this scenario, the company's productivity would actually go up.

如果给他们这一切意味着，作为回报，工人们能够每天多花四十五分钟专注于他们的任务，该怎么办？他的粗略计算表明，在这种情况下，公司的生产力实际上会提高。

Giving people more time to rest and enjoy life might mean they worked more productively when they were in the office.

给人们更多的时间休息和享受生活可能意味着他们在办公室时工作效

率更高。

To see if this could be right, he started to look back over the history of experiments in changing people's work hours. For example, in Britain during the First World War, there had been a munitions factory that made people work seven days a week. When they cut back to six days, they found, the factory produced more overall. How far, Andrew wondered, could that principle be extended?

为了看看这是否正确，他开始回顾改变人们工作时间的实验历史。例如，第一次世界大战期间的英国，曾有一家军火工厂，让人每周工作7天。他们发现，当他们把时间缩短到六天时，工厂的整体产量增加了。安德鲁想知道，这个原则可以延伸到什么程度？

So he decided to try something bold. He arranged a conference call and told all his employees that starting soon, they were going to be paid the same wage they currently got for a five-day week, but they would only be asked to work four days.

于是他决定做一些大胆的尝试。他安排了一次电话会议，并告诉所有员工，从不久开始，他们将获得与目前每周工作五天的工资相同的工资，但只会要求他们工作四天。

However, he told them – in return, you have to find ways to genuinely get the job done. My hunch is you'll be more productive – but you have to show me I'm right. We'll try this change for two months.

然而，他告诉他们——作为回报，你必须找到真正完成工作的方法。我的预感是你会更有效率——但你必须向我证明我是对的。我们将尝试这一改变两个月。

If, in that period, we don't see a fall in productivity, I will make the four-day week permanent. 'I was like – what? Am I hearing this right?' I was told by Amber Taare when I went to interview everyone at the offices Perpetual has in a town named Rotorua, which is well away from the corporate headquarters. The workers were excited but wary. How could a plan like this really succeed? Was there some catch they couldn't see? Gemma Mills, who also works in the Rotorua offices, told me: 'I didn't have a lot of faith that it was going to work.' Andrew's management team was also highly sceptical. 'My head of HR literally fell over,' Andrew said.

如果在此期间我们没有看到生产力下降，我将永久实行四天工作制。“我当时想——什么？我没听错吧？”当我去采访 Perpetual 位于罗托鲁瓦镇的办公室的每个人时，安布尔·塔雷告诉我，该镇距离公司总部很远。工人们很兴奋，但也很警惕。这样的计划怎么可能真的成功呢？是不是有什么他们看不到的陷阱？同样在罗托鲁瓦办事处工作的杰玛·米尔斯 (Gemma Mills) 告诉我：“我对它会奏效没有太大信心。”安德鲁的管理团队也非常怀疑。“我的人力资源主管简直摔倒了，”安德鲁说。

The managers felt sure that productivity would be dented, and the blame would come back to them.

经理们确信生产力会下降，责任会回到他们身上。

He gave the company a month to prepare, in which everyone had to think about how they could work better, and he called in a team of academic researchers to measure the real outcomes.

他给了公司一个月的准备时间，每个人都必须思考如何才能更好地工作，他还召集了一个学术研究团队来衡量真正的结果。

Niggling drains on productivity that had been dragging on for years were identified and finally dealt with.

多年来一直存在的生产力下降问题得到了查明并最终得到解决。

One person, for example, had a job where she had to enter data, and it was wasting an hour of her day to have to enter it twice because two different systems weren't talking to each other. Now she went to IT and insisted they sort it out.

例如，一个人的工作必须输入数据，而她一天中的一个小时必须输入两次，因为两个不同的系统无法相互通信。现在她去找IT部门并坚持要求他们解决这个问题。

There were hundreds of changes like this happening across the company. In another office, the staff bought a little pot of flags, and everyone agreed that if you didn't want to be interrupted, you put a flag on your desk from now on, to show you are focusing.

整个公司发生了数百起类似的变革。在另一个办公室，工作人员买了一小盆旗帜，大家一致认为，如果你不想被打扰，从现在开始就在你的

办公桌上放一面旗帜，以表明你正在集中注意力。

‘It took a while to get your head around the concept, because it’s so challenging,’ I was told by Russell Bridge, another Perpetual Guardian employee. ‘If you’ve worked on an eight-to-five model for so long, it’s so ingrained and entrenched.’ But the change happened. With a whole extra day to themselves, people spent this time in different ways.

另一位 Perpetual Guardian 员工 Russell Bridge 告诉我：“你花了一段时间才理解这个概念，因为它太具有挑战性了。”“如果你已经在八点到五点的模式上工作了这么长时间，它就会变得根深蒂固、根深蒂固。”但变化发生了。多了一天的时间，人们以不同的方式度过这段时间。

Amber took her three-year-old daughter out of day care for one day a week, and played with her more.

安布尔每周有一天带她三岁的女儿离开日托中心，多陪她玩。

Gemma said ‘it just gives you that extra day to recuperate,’ and as a result, ‘I just felt genuinely better overall.’ Russell started to do DIY repairs around his home, and spent ‘quality time with the family’.

杰玛说，“这只是让你多了一天的恢复时间”，因此，“我真的感觉整体好多了。”拉塞尔开始在他的家周围进行 DIY 维修，并与家人度过了“美好时光”。

He told me it helped him to realise that ‘the way humans are designed is to have downtime and [then] you will be more productive’. He found that when he came back to work, he was ‘fresher’.

他告诉我，这帮助他认识到“人类的设计方式就是有休息时间，然后你会更有效率”。他发现，当他回到工作岗位时，他“精神焕发”。

Almost everyone I spoke to who went through this experiment stressed that they noticed one change above all the others. As Gemma put it to me: ‘I was less likely to be distracted.’ Why? She said that, for her, it was about decompression. ‘I think your brain doesn’t necessarily switch off as easily if you’re going, going, going.’

几乎所有经历过这个实验的人都强调，他们首先注意到了一个变化。正如杰玛对我说的：“我不太可能分心。”为什么？她说，对她来说，这

是一种减压。“我认为，如果你不停地走、走、走，你的大脑不一定会那么容易关闭。

You don't take that time to switch off and relax... Your brain becomes accustomed to thinking constantly.' But she found that with 'that extra day to relax', she could start to wind down – and so when she came back to work, her mind was clearer.

你不会花这段时间休息和放松.....你的大脑会习惯于不断思考。”但她发现，有了“额外的一天放松时间”，她就可以开始放松下来——所以当她回到工作岗位时，她的头脑更加清晰了。

Of course, the workers had a vested reason to believe this – they wanted to keep the extra time off. What mattered more was more objective measurements. What did the academics who studied the changes find? All signs of distraction, they found, were radically down.

当然，工人们有既得理由相信这一点——他们想保留额外的休息时间。更重要的是更客观的测量。研究这些变化的学者发现了什么？他们发现，所有分心的迹象都急剧下降。

For example, the time people spent on social media at work – which was measured by monitoring their computers – fell by 35 percent.

例如，人们在工作中花在社交媒体上的时间（通过监控计算机来衡量）下降了 35%。

At the same time, levels of engagement, teamwork and stimulation at work – some of which were measured by observing the workers, and some by how the workers described themselves – went up by between 30 and 40 percent. Stress levels were down by 15 percent.

与此同时，工作中的敬业度、团队合作和激励水平——其中一些是通过观察员工来衡量的，一些是通过员工如何描述自己来衡量的——提高了 30% 到 40%。压力水平下降了 15%。

People told me they slept more, rested more, read more, relaxed more. Andrew's management team – who had initially been highly sceptical – reached a surprising conclusion: they conceded that the company was achieving as much in four days as they had before in five. The

changes have now been made permanent.

人们告诉我他们睡得更多、休息得更多、阅读更多、放松得更多。安德鲁的管理团队最初对此表示高度怀疑，但他们得出了一个令人惊讶的结论：他们承认公司在四天内取得的成就与之前在五天内取得的成就一样多。这些变化现已成为永久性的。

Dr Helen Delaney, who studied these changes as part of her work in the Faculty of Business and Economics at the University of Auckland, told me with a laugh: ‘It wasn’t a monstrous failure – I think we can say that.

海伦·德莱尼博士在奥克兰大学商业与经济学院研究这些变化，她笑着告诉我：“这并不是一次巨大的失败——我想我们可以这么说。

The work got done, clients were happy, staff were happy.’ When she interviewed them in depth, she found that ‘overwhelmingly, employees really liked their four-day workweek ... They loved it. Who wouldn’t?’ Helen found this extra time gave them two things.

工作完成了，客户很高兴，员工也很高兴。”当她深入采访他们时，她发现“绝大多数员工真的很喜欢每周四天的工作……他们喜欢它。谁不会呢？”海伦发现额外的时间给了他们两件事。

Firstly, it ‘allowed them to nurture relationships with other people that are lost in the frenzy of modern living’.

首先，它“让他们能够与在现代生活的疯狂中迷失的其他人培养关系”。

One senior manager told her he had struggled to connect with his son, but now he had started spending a lot of his freed-up time with him, he ‘realised actually I like being with my son, and he quite likes me, and this is a nice time to be together’.

一位高级经理告诉她，他一直在努力与儿子建立联系，但现在他开始花大量空闲时间和儿子在一起，他“意识到我实际上喜欢和儿子在一起，他也很喜欢我，而这是一个在一起的美好时光。”

Secondly, ‘they also talked a lot about having what they called “me time”’. They told her ‘with no one around me, no kids, no partner, no

one – I got to be myself.

其次，“他们还谈论了很多关于所谓的‘自我时间’的事情”。他们告诉她“周围没有人，没有孩子，没有伴侣，没有人——我必须做我自己”。

Something similar has been tried in many other places, and even though the experiments are quite different, they keep finding similar outcomes. In 1920s Britain, W. G. Kellogg – the manufacturer of cereals – cut his staff from an eight-hour day to a six-hour day, and workplace accidents (a good measure of attention) fell by 41 percent.

许多其他地方也尝试过类似的方法，尽管实验有很大不同，但他们不断发现相似的结果。20 年代的英国，谷物生产商 W. G. Kellogg 将员工的工作时间从每天 8 小时减少到 6 小时，工作场所事故（注意力的良好衡量标准）下降了 41%。

In 2019 in Japan, Microsoft moved to a four-day week, and they reported a 40 percent improvement in productivity.

2019 年，微软在日本实行了四天工作制，他们报告说生产力提高了 40%。

In Gothenberg in Sweden around the same time, a care home for elderly people went from an eight-hour day to a six-hour day with no loss of pay, and as a result, their workers slept more, experienced less stress, and took less time off sick. In the same city, Toyota cut two hours per day off the work week, and it turned out their mechanics produced 114 percent of what they had before, and profits went up by 25 percent.

大约在同一时间，瑞典哥德堡的一家老人疗养院从每天工作 8 小时改为每天工作 6 小时，而且工资没有减少，结果，他们的工作人员睡得更多了，压力减轻了，工作效率也提高了。病假时间更少。在同一个城市，丰田公司每周每天减少两个小时的工作时间，结果他们的机械师的产量是以前的 114%，利润增加了 25%。

All this suggests that when people work less, their focus significantly improves. Andrew told me we have to take on the logic that more work is always better work. ‘There’s a time for work, and there’s a time for not having work,’ he said, but today, for most people, ‘the problem is that we don’t have time. Time, and reflection, and a bit of rest to help us make better decisions.

所有这些都表明，当人们工作量减少时，他们的注意力就会显着提高。安德鲁告诉我，我们必须接受这样的逻辑：更多的工作总是更好的工作。“有工作的时候，也有不工作的时候，”他说，但今天，对于大多数人来说，“问题是我们没有时间。”时间、反思和休息可以帮助我们做出更好的决定。

So, just by creating that opportunity, the quality of what I do, of what the staff does, improves.’ Andrew followed his own advice.

因此，只要创造这个机会，我和员工的工作质量就会提高。”安德鲁遵循了自己的建议。

Now he takes every weekend off – something he had never done before in his life – and goes away to his home on a nearby island without any devices connected to the internet. Gemma, one of the workers who told me that she had been wary at the start, said to me gently: ‘You know, there’s so much more than working until twelve o’clock at night ... You’ve got to have a life outside of it.’

现在，他每个周末都会休假——这是他一生中从未做过的事情——然后回到附近岛屿上的家，没有任何设备连接到互联网。杰玛（Gemma）是一名工人，她告诉我她一开始很谨慎，她温柔地对我说：“你知道，工作到晚上十二点不只是如此……你必须要有外面的生活。”的。

Later, at Stanford University, I discussed these questions with Jeffrey Pfeffer, who is a professor of organisational behaviour there. He said the reason it works is blindingly obvious. Ask any sports fan, he said.

后来，在斯坦福大学，我与杰弗里·普费弗（Jeffrey Pfeffer）讨论了这些问题，他是斯坦福大学的组织行为学教授。他说它起作用的原因是显而易见的。他说，问问任何一位体育迷。

‘If I want to win a football game, [or] if I want to win a baseball game, do I really want my team to be exhausted?’ He let this question hang in the air. Why, he asked, would the rest of us be any different?

“如果我想赢得一场足球比赛，[或者]如果我想赢得一场棒球比赛，我真的希望我的球队精疲力尽吗？”他让这个问题悬而未决。他问道，为什么我们其他人会有所不同？

One day I went for a walk along the shore in Auckland, thinking about what I had seen – and it struck me that this was the first place I had been to that had directly challenged the logic of our ever-accelerating society.

有一天，我沿着奥克兰海岸散步，思考着我所看到的一切——我突然意识到，这是我去过的第一个直接挑战我们不断加速的社会逻辑的地方。

We live in a culture that gets us to walk faster, talk faster, work longer, and we are taught to think that is where productivity and success come from. But here was a group of people saying: No. We are going to slow down and create more space for rest and attention.

我们生活在一种让我们走得更快、说话更快、工作时间更长的文化中，我们被教导认为这就是生产力和成功的来源。但有一群人说：不。我们要放慢速度，创造更多的休息和注意力空间。

At the moment, this sane decision looks like an impossible luxury to the majority of us. Most people can't slow down, because they fear that if they do, they'll lose their jobs or their status. Today, only 56 percent of Americans take even one week of vacation a year.

目前，对于我们大多数人来说，这个明智的决定似乎是一种不可能的奢侈。大多数人无法放慢脚步，因为他们担心如果放慢脚步，他们就会失去工作或地位。如今，只有 56% 的美国人每年休假一周。

This is why telling people what they need to do to improve their attention – do one thing at a time, sleep more, read more books, let your mind wander – can so easily curdle into cruel optimism. The way our society works at the moment means they can't do those things. But it doesn't have to be this way. Our society can change. As I reflected on this, I felt a little uneasy, because there's a few reasons why telling you the story of what happened in New Zealand in this way could leave you with a misleading impression.

这就是为什么告诉人们需要做什么来提高注意力——一次只做一件事、多睡觉、多读书、让你的思绪走神——很容易就会陷入残酷的乐观情绪。我们社会目前的运作方式意味着他们不能做这些事情。但事情不一定非得这样。我们的社会可以改变。当我思考这个问题时，我感到有点不安，因为有几个原因可以解释为什么用这种方式告诉你新西兰发生的事情会给你留下误导性的印象。

I like Andrew Barnes a lot – he’s an unusually enlightened and decent employer – but I don’t want you to imagine you too can wait for your boss to have an epiphany and hand you a four-day week. If we want this change to happen, you will very likely have to take a different route.

我非常喜欢安德鲁·巴恩斯（Andrew Barnes）——他是一位异常开明、体面的雇主——但我不希望你想象你也可以等待你的老板顿悟并给你一个为期四天的一周。如果我们希望发生这种变化，您很可能必须采取不同的路线。

Think about the weekend, which for a more than a hundred years gave most workers a guaranteed slice of rest and reflection. How did that come to pass? In the eighteenth century, as the Industrial Revolution surged, many workers found themselves forced by their employers to work for ten hours a day, six days a week. It was breaking them, physically and mentally. So they began to band together and demanded time to live.

想想周末，一百多年来，周末为大多数工人提供了一定的休息和思考机会。这是怎么发生的？十八世纪，随着工业革命的兴起，许多工人发现自己被雇主强迫每周工作六天，每天工作十小时。这在身体上和精神上都在摧毁他们。于是他们开始联合起来，要求活下去。

The first strike demanding shorter working hours took place in Philadelphia in 1791. The police beat the workers to a pulp, and afterwards, many of them were fired. But the workers didn’t give up. They fought harder.

1791年，费城发生了第一次要求缩短工作时间的罢工。警察把工人打得稀巴烂，随后许多人被解雇。但工人们并没有放弃。他们越战越勇。

By 1835 they were organising a General Strike for an eight-hour day. Only decades of campaigns like this finally yielded an eight-hour day and a weekend for almost everyone.

到 1835 年，他们组织了一次每天八小时的总罢工。经过数十年的这样的活动，最终为几乎每个人带来了八小时的工作时间和周末。

With a few honourable exceptions like Andrew, the owners of corporations will not voluntarily take less of your time, any more than

Facebook will. They have to be compelled to do it. The introduction of the weekend was the biggest challenge to the speeding-up of society that has ever happened. Only a comparable fight will deliver a four-day week.

除了像安德鲁这样的一些光荣的例外，公司所有者不会自愿减少你的时间，就像 Facebook 一样。他们必须被迫这样做。周末的推出是有史以来对社会加速发展的最大挑战。只有一场类似的比赛才能带来为期四天的一周。

This insight is connected to another big obstacle to achieving this goal. A four-day week can be applied to salaried workers – but increasingly, many people are being forced into the ‘gig economy’, where they scramble to do several jobs without any contracts or fixed work hours at all. This is happening as a result of a very specific change: in countries like the US and Britain, governments broke up and largely destroyed labour unions.

这种见解与实现这一目标的另一个大障碍有关。每周工作四天可以适用于受薪工人，但越来越多的人被迫进入“零工经济”，他们在没有任何合同或固定工作时间的情况下争先恐后地做几份工作。这是由于一个非常具体的变化而发生的：在美国和英国等国家，政府解体并在很大程度上摧毁了工会。

They made it harder and harder for workers to band together and demand things like contracts and fixed work hours. The only long-term solution to this is to steadily rebuild unions – so people have the power to demand these basic rights. This has already begun. For example, all over the US, workers in fast-food restaurants are unionising and demanding a \$15 minimum wage per hour, with incredible success.

它们让工人们越来越难团结起来并提出合同和固定工作时间等要求。解决这个问题的唯一长期解决方案是稳步重建工会——这样人们就有权力要求这些基本权利。这已经开始了。例如，在美国各地，快餐店的工人正在组织工会，要求每小时 15 美元的最低工资，并取得了令人难以置信的成功。

They have secured wage rises for over 22 million workers and have pulled off the difficult job of winning majority support both in states that voted for Donald Trump and in states that voted for Joe Biden.

他们确保了超过 2200 万工人的工资上涨，并完成了在投票支持唐纳德·特朗普的州和投票支持乔·拜登的州赢得多数支持的艰巨任务。

But I think we won't only have to take on employers – we'll also have to fight something inside ourselves. When I spent time with the workers at Perpetual Guardian, I found what they said persuasive – but in my gut, I kept pushing back, looking for flaws in what they were telling me. At first I couldn't figure out why.

但我认为我们不仅要与雇主较量——我们还必须与自己内心的某些东西作斗争。当我与 Perpetual Guardian 的工作人员相处时，我发现他们所说的很有说服力，但在我的内心深处，我一直在反驳，寻找他们告诉我的内容中的缺陷。起初我不明白为什么。

Then I realised that I often only feel I have worked enough if, at the end of the day, I am bone-tired and wrung out. The team who designed the original Macintosh computer wore T-shirts boasting 'Working 90 hours a week and loving it!' This could be the insane slogan for our professional class. Many of us have built our identities around working to the point of exhaustion. We call this success.

然后我意识到，通常只有在一天结束时我感到筋疲力尽时，我才会觉得自己已经工作得足够多了。设计最初的 Macintosh 电脑的团队穿着 T 恤，上面写着“每周工作 90 小时，并且热爱它！”这对于我们的专业人士来说可能是疯狂的口号。我们中的许多人都是在工作到精疲力尽的情况下建立自己的身份的。我们称之为成功。

In a culture built on ever-increasing speed, slowing down is hard, and most of us will feel guilty about doing it. That's one reason why it's important we all do it together – as a societal, structural change.

在一个以不断加快的速度为基础的文化中，放慢速度是很困难的，而且我们大多数人都都会为此感到内疚。这就是我们共同努力的重要原因之一——作为一种社会结构性变革。



When Covid-19 spread across the world, lots of people thought – amid all the tragedy and horror – that there might at least be one good outcome. Many people (not all) were freed from the daily commute and from the pressure to be seen at their desks all the time.

当 Covid-19 在世界范围内传播时，许多人在所有的悲剧和恐怖中都认为，至少可能会有一个好的结果。许多人（不是全部）摆脱了日常通勤和一直坐在办公桌前的压力。

So it was assumed that there might be a little space created for more rest. But work hours actually went *up* during Covid – in the first month and a half of lockdown alone, the average US worker clocked in three extra hours a day. In France, Spain and Britain, people worked two hours more a day on average. It's not totally clear why.

因此，人们认为可能会留出一些空间供更多休息。但在新冠疫情期间，工作时间实际上有所增加——仅在封锁的头一个半月里，美国工人平均每天就多工作三个小时。在法国、西班牙和英国，人们平均每天工作两个小时。目前还不完全清楚原因。

Some people think it's because Zoom meetings take so damn long; others reckon it's because, given all the economic insecurity, people were even more keen to show they were working so they didn't get laid off.

有些人认为这是因为 Zoom 会议时间太长了；其他人认为这是因为，考虑到经济上的不安全感，人们更愿意表明自己正在工作，这样就不会被解雇。

What this shows is that no big outside force is going to come along and free us from the ratchet to work more and more hours – not even a global pandemic. We will only get it through a collective struggle to change the rules.

这表明，没有任何强大的外部力量能够将我们从工作时间越来越长的困境中解放出来 —— 即使是一场全球流行病。我们只有通过集体斗争改变规则才能实现这一目标。

But Covid also showed us something else that is relevant to a four-day week. It demonstrated that businesses can change their working practices radically, in a very short period of time, and continue to function well. When I caught up with him on Zoom in early 2021, Andrew Barnes said to me: 'If a chief executive of a British bank had said, "We could run a 60,000-person bank from home," a year and a half ago you'd have said – no chance. Right?' And yet it happened, pretty seamlessly.

但新冠疫情还向我们展示了与每周四天工作相关的其他内容。它表明企业可以在很短的时间内从根本上改变其工作实践，并继续良好运作。2021 年初，当我在 Zoom 上见到安德鲁·巴恩斯 (Andrew Barnes) 时，安德鲁·巴恩斯 (Andrew Barnes) 对我说：“如果一家英国银行的首席执行官在一年半前说，‘我们可以在家运营一家拥有 6 万名员工的银行’，那么你会说——没有机会。对吧？”然而事情却发生了，而且非常顺利。

‘So ... surely you can run a business in four days, not five?’ Andrew told me other managers used to say to him that a four-day week couldn’t possibly work because they wouldn’t be able to trust their staff if they couldn’t see them.

“那么……你肯定可以在四天内经营一家企业，而不是五天吗？”安德鲁告诉我，其他经理曾经对他说，每周工作四天是行不通的，因为如果他们看不到他们。

Andrew called them back and said they should think again now: ‘They all work from home. Amazingly, the work got done.’

安德鲁给他们回了电话，说他们现在应该再考虑一下：“他们都在家工作。”令人惊讶的是，工作完成了。

The way we work seems fixed and unchangeable – until it changes, and then we realise it didn’t have to be like that in the first place.

我们的工作方式似乎是固定的、不可改变的——直到它发生变化，然后我们意识到它本来不必是这样的。



Ten thousand miles away, in Paris, workers had come up with a parallel proposal to help slow their lives down. Before the rise of smartphones, it was unusual for a boss to contact her worker once she had left the office and gone home.

一万英里外的巴黎，工人们提出了一项类似的提案，以帮助放慢生活节奏。在智能手机兴起之前，老板很少会在员工离开办公室回家后联系她。

As a kid, plenty of my friends had parents with demanding jobs – but I almost never saw them get phoned by their employer once they got home. It was rare in the 1980s: when work was over, it was over.

小时候，我的很多朋友的父母都从事繁重的工作，但我几乎从未见过他们回家后接到雇主的电话。这在 20 世纪 80 年代很少见：工作结束了，一切就结束了。

The only people who lived on permanent call were doctors, presidents and prime ministers.

唯一长期待命的人是医生、总统和总理。

But since our work lives came to be dominated by email, there's a growing expectation that workers will respond at any time, day or night. One study found that a third of French professionals felt they could never unplug, for fear of missing out on an email they were expected to reply to. Another study found that just the expectation that you should be on call causes workers anxiety, even if they don't actually get contacted on any given night.

但由于我们的工作生活已被电子邮件占据，人们越来越期望员工能够在白天或晚上随时回复。一项研究发现，三分之一的法国专业人士认为他们永远无法拔掉电源，因为担心错过他们需要回复的电子邮件。另一项研究发现，仅仅期望你随叫随到就会导致员工焦虑，即使他们在任何一个晚上实际上都没有得到联系。

In effect, the idea of work hours has disappeared, and we are all on call all the time. By 2015, French doctors explained they were seeing an explosion in patients suffering from '*le burnout*', and voters started to demand action – so the French government commissioned Bruno Mettling, the head of the telecoms company Orange, to study the evidence and figure out a solution. He concluded that this constantly-on-call way of working was disastrous for people's health and their ability to do their jobs.

事实上，工作时间的概念已经消失，我们随时待命。到 2015 年，法国医生解释说，他们看到患有“职业倦怠”的患者激增，选民开始要求采取行动，因此法国政府委托电信公司 Orange 的负责人布鲁诺·梅特林 (Bruno Metdling) 研究证据并找出答案一个办法。他的结论是，这种随时待命的工作方式对人们的健康和工作能力来说是灾难性的。

He proposed a significant reform: he said that everyone should have a 'right to disconnect'.

他提出了一项重大改革：他说每个人都应该有“断开连接的权利”。

This right is simple. It says: you are entitled to clearly defined work hours – and you are entitled, when those work hours are over, to unplug and not have to look at email, or to have any other work contact. So in 2016, the French government passed this into law.

这个权利很简单。它说：您有权享受明确规定的工作时间 - 并且您有权在工作时间结束后拔掉电源，而不必查看电子邮件或进行任何其他工作联系。因此，2016年，法国政府将其通过为法律。

Now any company with more than fifty people has to formally negotiate with its workers to agree the hours in which they can be contacted – and all other hours are out of bounds.

现在，任何拥有超过 50 名员工的公司都必须与员工进行正式谈判，以商定可以联系他们的时间，而所有其他时间均不适用。

(Smaller companies can draw up their own charters but don't have to formally consult their workers.) Since then, several companies have faced penalties for trying to force people to respond to email out of hours. For example, the pest-control company Rentokil had to pay a local branch manager €60,000 (around \$70,000 in the US and £50,000 in the UK) in compensation after it had complained he didn't respond to out-of-hours emails.

(较小的公司可以制定自己的章程，但不必正式咨询员工。) 从那时起，有几家公司因试图强迫人们在工作时间外回复电子邮件而面临处罚。例如，害虫防治公司 Rentokil 因抱怨当地分公司经理没有回复非工作时间的电子邮件而不得不向其支付 60,000 欧元（在美国约为 70,000 美元，在英国约为 50,000 英镑）的赔偿。

In practice, when I went to Paris and spoke to my friends who work for companies there, they said change is happening too slowly on this – the law is not being enforced by a tough regulator, so most French people haven't yet experienced a big shift.

实际上，当我去巴黎并与在那里工作的朋友交谈时，他们说这方面的变化发生得太慢了——法律没有得到严格的监管机构的执行，所以大多数法国人还没有经历过重大转变。

But it's a first step in the direction we all need to travel.

但这是我们所有人都需要前进的方向的第一步。

Sitting in a café in Paris, I thought about what I had seen. There's no point giving people sweet self-help lectures about the benefits of unplugging unless you give them a legal right to do it.

坐在巴黎的一家咖啡馆里，我思考着我所看到的一切。除非你赋予人们这样做的合法权利，否则向人们进行关于拔掉插头的好处的甜蜜自助讲座是没有意义的。

In fact, lecturing people who aren't allowed to unwind by their bosses about the benefits of unwinding becomes a kind of maddening taunt – it's like lecturing famine victims on how they'd feel better if they had dinner at the Ritz.

事实上，向那些老板不允许放松的人讲授放松的好处变成了一种令人发狂的嘲讽——就像向饥荒受害者讲授如果他们在丽兹酒店吃晚饭他们会感觉更好一样。

If you have an independent fortune and you don't need to work, then you can probably make these changes now.

如果你有独立的财富并且不需要工作，那么你现在就可以做出这些改变。

But for the rest of us, we need to be part of a collective struggle in order to reclaim the time and space that has been taken from us – so we can finally rest, and sleep, and restore our attention.

但对于我们其他人来说，我们需要参与集体斗争，以夺回被剥夺的时间和空间——这样我们才能最终休息、睡觉、恢复注意力。

Causes Nine and Ten: Our Deteriorating Diets and Rising Pollution

12

12 原因九和十：我们日益恶化的饮食和日益严重的污染

For every summer of my childhood and my teenage years, I was banished from my home in suburban London to a place that seemed as alien to me as the rings of Saturn. My dad had been born in a wooden farmhouse on a mountain in the Swiss Alps.

在我童年和青少年时期的每个夏天，我都被从伦敦郊区的家放逐到一个对我来说像土星环一样陌生的地方。我父亲出生在瑞士阿尔卑斯山一座木制农舍里。

‘You must go to the farm,’ my father yelled, ‘it will teach you how to be a man!’ And so, for six weeks of the year, I would be woken up every morning by the crowing of a cockerel, in a fog of deep confusion, in the tiny room my father had shared as a kid with his four brothers.

“你必须去农场，”我父亲喊道，“它会教你如何做一个男人！”就这样，一年中的六个星期，每天早上我都会被公鸡的叫声叫醒，在父亲小时候和他的四个兄弟共用的小房间里，弥漫着深深的困惑。

The first summer I spent alone with my Swiss grandparents was

when I was nine years old. I learned that all through their lives, they had mostly eaten food that they had grown, raised or killed themselves.

我和瑞士祖父母单独度过的第一个夏天是在我九岁的时候。我了解到，在他们的一生中，他们吃的食物大多是他们自己种植、饲养或杀死的。

They had a huge garden, where they planted their own fruit and vegetables, and they raised their own animals for meat. But when they put their food on the table in front of me, I stared at it and struggled to recognise that it was even edible.

他们有一个巨大的花园，在那里种植自己的水果和蔬菜，并饲养自己的动物以获取肉类。但当他们把食物放在我面前的桌子上时，我盯着它，很难意识到它甚至可以吃。

Back home, my mother and my other grandmother were working-class Scottish women, and they had raised me on a diet of chips, fried food, supermarket-bought processed meals and vast amounts of Kinder Egg chocolate.

在家里，我的母亲和我的另一位祖母都是苏格兰工人阶级女性，她们养大我的饮食包括薯片、油炸食品、超市购买的加工食品和大量的健达鸡蛋巧克力。

We got a microwave when I was about seven, and from that point on I lived primarily on radiated pizza and zapped French fries. So for the first few weeks I was in Switzerland, I pleaded for chips, pizza, anything that I saw as food, and I refused to eat what my grandmother prepared. *‘Ce n’est pas nourriture!’* I said sincerely: ‘It’s not food.’

我七岁左右的时候，我们有了微波炉，从那时起，我主要靠辐射披萨和炸薯条为生。因此，在我来到瑞士的最初几周，我恳求薯条、披萨以及任何我认为是食物的东西，但我拒绝吃祖母准备的东西。“这不是食物！”我真诚地说：“这不是食物。”

My grandparents were baffled. One day my grandmother caved in and took me to the city several hours away for a McDonald’s. She didn’t order anything for herself, and she watched me eat my Big Mac and fries with a look of compassionate disgust.

我的祖父母很困惑。有一天，我的祖母屈服了，带我去几个小时外的城里吃麦当劳。她没有为自己点任何东西，她看着我吃着巨无霸和薯条，一脸同情和厌恶。

Years later, in Las Vegas, I stumbled one day upon a very mentally unwell homeless person who was eating rotting maggot-filled food from the garbage behind the Rio casino.

多年后，有一天，在拉斯维加斯，我偶然发现了一位精神非常不适的无家可归者，他正在吃里约赌场后面垃圾堆里的腐烂的、长满蛆虫的食物。

I realised my facial expression was exactly the same as my grandmother's had been that day in the McDonald's in Zurich.

我意识到我的面部表情和我祖母那天在苏黎世麦当劳的表情一模一样。

In the two generations that had passed from my grandparents to me, there had been a dramatic transformation in one of the most basic elements of being a human – what we put into our bodies for fuel.

从我的祖父母到我的两代人，人类最基本的元素之一——我们放入体内作为燃料的物质——发生了巨大的转变。

All over the world I interviewed experts who said that we all know this change has been bad for our waistlines and our hearts, but we have been neglecting another key effect: it is stealing large parts of our ability to pay attention.

我采访了世界各地的专家，他们说我们都知道这种变化对我们的腰围和心脏不利，但我们一直忽视了另一个关键影响：它剥夺了我们大部分注意力的能力。

Dale Pinnock is one of the best-known nutritionists in Britain, and when we sat down together for a meal in London, I tried not to look at the juicy hamburgers on the menu, and ordered tofu and vegetables instead, just to impress him.

戴尔·平诺克（Dale Pinnock）是英国最著名的营养学家之一，当我们在伦敦一起吃饭时，我尽量不看菜单上多汁的汉堡，而是点了豆腐和蔬菜，只是为了给他留下深刻印象。

He told me that if you want to understand why so many of us are struggling to focus, you might want to think about it this way. ‘If you put shampoo into a car engine, you’re not going to scratch your head when the thing conks out,’ he said.

他告诉我，如果你想理解为什么我们这么多人难以集中注意力，你可能需要这样思考。他说：“如果你把洗发水放入汽车发动机中，当发动机出故障时，你就不会感到头疼了。”

Yet every day, all over the Western world, we are putting into our bodies substances ‘which are so far removed from what was intended for human fuel’. Achieving sustained attention, he said, is a physical process that requires your body to be able to do certain things.

然而，在整个西方世界，我们每天都在向体内注入“与人类燃料相去甚远”的物质。他说，获得持续的注意力是一个物理过程，需要你的身体能够做某些事情。

So if you disrupt your body – by depriving it of the nutrients it needs, or by pumping it full of pollutants – your ability to pay attention will also be disrupted.

因此，如果你破坏了你的身体——剥夺它所需的营养，或者让身体充满污染物——你的注意力也会受到破坏。

Dale, and other experts on this question I spent time with across the world, went on to outline three broad ways in which the way we eat now is harming our focus. The first is that we currently eat a diet that causes regular energy spikes and energy crashes. If you eat (say) a Twinkie, he said, your ‘blood sugar is going through the roof, and then crashing back down again.

戴尔和我在世界各地与有关这个问题的其他专家一起，继续概述了我们现在的饮食方式正在损害我们的注意力的三种主要方式。首先，我们目前的饮食习惯会导致定期的能量激增和能量崩溃。他说，如果你吃了一块夹心蛋糕，你的“血糖就会冲上屋顶，然后又急剧下降。”

That’s going to affect how you can actually physically focus, because if your energy is through the floor, you’re not going to be able to give things your full attention.’ But most of us now start the day with the

equivalent of a Twinkie, though we don't realise it.

这将影响你如何真正集中注意力，因为如果你的能量通过地板，你将无法全神贯注。”但我们大多数人现在以一块夹心蛋糕开始新的一天，尽管我们没有意识到。

‘Think about that typical pattern. People will eat maybe a bowl of cereal and a slice of toast in the morning. It's usually Frosties and white bread.’ Because there's very little fibre in there, glucose – which gives you energy – ‘will be released very, very rapidly.

“想想那个典型的模式。人们早上可能会吃一碗麦片和一片吐司。通常是糖霜和白面包。”因为其中的纤维很少，为你提供能量的葡萄糖“会非常非常迅速地释放。

So your blood sugar goes really high, really quickly, which is great – for about twenty minutes.’ Then ‘it crashes down, and when it crashes down, that's when you're knackered’ and at this point, ‘you get brain fog’.

所以你的血糖会变得非常高，非常快，这很棒——持续大约二十分钟。”然后“它会崩溃，当它崩溃时，那就是你精疲力尽的时候”，在这一点上，“你会出现脑雾”’。

When that happens, you sit at your desk and you struggle to think. Your child experiences that crash sitting at school, and she isn't able to listen to the teacher.

当这种情况发生时，你坐在办公桌前，很难思考。您的孩子在学校里会经历这种崩溃，她无法听老师讲课。

This is where ‘you have very, very low energy, and you constantly feel like you need a pick-me-up ... That is the blood sugar crashing.’ When this happens, you and your kid want more sugary-carby treats in order to get another short burst of focus.

这就是“你的能量非常非常低，你总是感觉自己需要提神.....这就是血糖崩溃的原因。”当这种情况发生时，你和你的孩子想要更多的含糖碳水化合物食物以获得另一个短暂的焦点。

‘If every mealtime you're consuming those cheap, shitty

carbohydrates, then you're going to be going on that rollercoaster over and over again.' He added that if you're consuming those kinds of foods with caffeine, the effect on blood sugar is exaggerated even further: 'If you had a croissant on its own, your blood sugar would obviously spike, but if you had it with a coffee, it would spike even higher, and you would get a much more aggressive crash.' These spikes and crashes take place throughout the day, leaving us so depleted that we can't focus well for long stretches.

“如果你每次进餐时都吃那些廉价、糟糕的碳水化合物，那么你就会一遍又一遍地坐过山车。”他补充说，如果你吃那些含有咖啡因的食物，对血液的影响糖分被进一步夸大：“如果你单独吃羊角面包，你的血糖显然会飙升，但如果你把它和咖啡一起吃，它会飙升得更高，你会遭受更严重的崩溃。”高峰和崩溃全天都会发生，让我们精疲力竭，无法长时间集中注意力。

He said that all this – shifting metaphor slightly – is ‘like putting rocket fuel into a Mini. It would just burn out and bust very quickly – because it can't handle that. But put in the petrol it's designed to take, and it'll go along nicely.’

他说，所有这一切——稍微改变一下比喻——“就像把火箭燃料放进你车里一样”。它很快就会耗尽并崩溃——因为它无法处理这个问题。但只要加入它设计需要的汽油，它就会行驶得很好。”

There is such a strong scientific consensus that our current diets cause these energy crashes that the British National Health Service's carefully fact-checked official website warns about it. So, Dale said, if we want to improve our kids' focus and attention, our first step should be to ‘stop feeding them fucking Coke for breakfast and a bowl of sugar and milk. Try giving them proper food first.’ If we do, he said we'll see rapid results, because ‘the developing brain is so responsive to change’.

科学界有如此强烈的共识，即我们目前的饮食会导致这些能量崩溃，以至于英国国家卫生服务局经过仔细事实核查的官方网站对此发出了警告。因此，戴尔说，如果我们想提高孩子的注意力，我们的第一步应该是“停止给他们早餐喂可乐和一碗糖和牛奶”。首先尝试给他们适当的食物。”他说，如果我们这样做，我们会很快看到结果，因为“发育中的大脑对变化非常敏感”。

(He later explained that, at the moment, parents have to fight against an army of advertisers trying to get their kids to eat badly, and a food-supply system that is designed to hack our weaknesses – I'll come to that soon.)

(他后来解释说，目前，父母必须对抗一大群试图让孩子吃得不好的广告商，以及旨在克服我们弱点的食品供应系统——我很快就会谈到这一点。)

The second way in which our diets affect our focus is that most of us now eat in a way that deprives us of the nutrients we need for our brains to develop and function fully.

我们的饮食影响我们注意力的第二种方式是，我们大多数人现在的饮食方式剥夺了我们大脑充分发育和发挥功能所需的营养。

For almost all of our history, human beings ate, roughly, like my grandparents – they consumed fresh food that they knew the origin of. As the great food writer Michael Pollan, who's a big influence on Dale, has explained, in the two generations between them and me, food went through a profound degeneration.

在我们几乎所有的历史中，人类的饮食方式大致就像我的祖父母一样——他们吃的是他们知道来源的新鲜食物。正如对戴尔影响很大的伟大美食作家迈克尔·波伦 (Michael Pollan) 所解释的那样，在他们和我之间的两代人，食物经历了深刻的退化。

In the mid-twentieth century there was a rapid move from fresh food towards pre-cooked, processed food that was sold in supermarkets and created in order to be reheated. This food had to be prepared for sale in a completely different way.

二十世纪中叶，新鲜食品迅速转向预煮加工食品，这些食品在超市出售，并为重新加热而生产。这种食物必须以完全不同的方式准备出售。

It was pumped full of stabilisers and preservatives to make sure it didn't go off as it sat on supermarket shelves, and this industrial process has, it turns out, stripped food of a lot of its nutritional value.

它被注入了大量的稳定剂和防腐剂，以确保它在超市货架上不会变质，而事实证明，这种工业过程剥夺了食品的很多营养价值。

Then, as we became more accustomed to food that was radically different to what had gone before, the food industry began to find more and more sophisticated ways to directly target our primitive pleasure centres.

然后，随着我们越来越习惯与以前截然不同的食物，食品工业开始寻找越来越复杂的方法来直接瞄准我们原始的快乐中心。

They pumped our foods full of sugars in quantities that never occur in nature, and trans fats, and various unprecedented new inventions.

他们向我们的食物中注入了自然界中从未存在过的大量糖分、反式脂肪以及各种前所未有的新发明。

In the US and Britain, most of what we eat now falls into the category of ‘ultra-processed food’ – which is, as Michael Pollan has pointed out, so removed from anything in nature that it’s very hard to figure out what the original ingredients even were.

在美国和英国，我们现在吃的大部分食物都属于“超加工食品”的范畴——正如迈克尔·波伦所指出的那样，这种食品与自然界的任何东西都相去甚远，以至于很难弄清楚它的原始成分是什么。成分甚至是。

There’s some uncertainty about precisely how this has affected our focus, but we have some pretty strong clues. Since the 1970s there have been several scientific studies designed to figure out what happens to your attention when you change your diet. To give one example, in 2009 a team of Dutch scientists took a group of twenty-seven children who had been identified as having trouble focusing, and they split them into two groups.

关于这到底如何影响我们的注意力还存在一些不确定性，但我们有一些相当有力的线索。自 20 世纪 70 年代以来，已有多项科学研究旨在了解当您改变饮食习惯时您的注意力会发生什么变化。举个例子，2009 年，荷兰科学家团队将 27 名被认为注意力不集中的儿童分成两组。

Fifteen of them were assigned to an ‘eliminationist’ diet, which meant they couldn’t consume the junk most of us eat every day – preservatives, additives, synthetic dyes – and so instead they had to eat the kind of food my grandparents would have recognised.

其中十五人被分配到“消除主义”饮食，这意味着他们不能吃我们大多

数人每天吃的垃圾食品——防腐剂、添加剂、合成染料——所以他们不得不吃我祖父母会吃的那种食物认可。

The other twelve carried on eating the usual Western diet. The team then monitored them for several weeks to see what happened.

另外十二个人继续吃通常的西方饮食。随后，该团队对他们进行了数周的监控，看看发生了什么。

It turned out that more than 70 percent of the kids who cut out the preservatives and dyes improved their ability to pay attention, and the average improvement was a remarkable 50 percent.

结果表明，在不使用防腐剂和染料的孩子中，超过 70% 的孩子注意力得到了提高，平均提高幅度高达 50%。

But this was a small study – so the same team decided to follow up. This time, they took a hundred children, and they did the experiment again, following kids over five weeks.

但这是一项小型研究，因此同一个团队决定跟进。这次，他们带着一百个孩子，再次进行了实验，跟踪孩子们超过五周。

Once again, it turned out that most of the kids who stuck to the eliminationist diet saw a big improvement in their attention and focus, and more than half got dramatically better.

事实再次证明，大多数坚持消除主义饮食的孩子的注意力和注意力都有了很大的改善，而且超过一半的人的情况得到了显著改善。

The scientists doing these studies have mostly been investigating the notion that these kids can't focus because they are allergic to something in our everyday diets. That's possible.

进行这些研究的科学家主要调查了这样一个观点：这些孩子无法集中注意力，因为他们对我们日常饮食中的某些东西过敏。这是可能的。

But their experiments seem to me more likely to fit with this wider way of thinking that I was learning about: that when you consume the kind of foods we evolved to eat, your brain will function better. In New York, I went for breakfast with Dr Drew Ramsay, who's one of the pioneers of 'nutritional psychiatry' – a new field that is teasing out

the connection between the way we eat and our psychological challenges. He said if anyone doubts these insights, he would ask them where ‘they think attention comes from ... The brain gets built from foods.

但在我看来，他们的实验更符合我正在学习的这种更广泛的思维方式：当你食用我们进化而来的食物时，你的大脑会更好地发挥作用。在纽约，我和德鲁·拉姆齐 (Drew Ramsay) 博士一起吃早餐，他是“营养精神病学”的先驱之一，这是一个新领域，旨在梳理我们的饮食方式与心理挑战之间的联系。他说，如果有人怀疑这些见解，他会问他们“他们认为注意力从何而来……大脑是由食物构成的”。

So there’s that very fundamental connection.’ Your brain, he told me, can only grow and thrive if it gets a broad range of key nutrients. To give one well-studied example, if you eat a diet that’s deprived of omega-3s – which are largely found in fish – your brain will suffer. And it’s not good enough to replace these foods with supplements – your body absorbs nutrients much more effectively from real food than from capsules.

所以这是非常基本的联系。”他告诉我，你的大脑只有获得广泛的关键营养素才能成长和繁荣。举一个经过充分研究的例子，如果您的饮食中缺乏 omega-3（这种物质主要存在于鱼类中），您的大脑就会受到影响。用补充剂来代替这些食物还不够——你的身体从真正的食物中吸收营养比从胶囊中吸收营养要有效得多。

The third reason is different. Our current diets aren’t just lacking in what we need – they also actively contain chemicals that seem to act on our brains almost like drugs.

第三个原因则不同。我们目前的饮食不仅缺乏我们所需要的东西，而且还含有大量化学物质，这些化学物质似乎几乎像药物一样作用于我们的大脑。

For example, in 2007 a group of scientists in Southampton in Britain got 297 normal kids, who were either three-year-olds or aged between eight and nine, and they split them into two groups.

例如，2007年，英国南安普敦的一组科学家收集了297名正常儿童，他们要么是三岁的孩子，要么是八到九岁的孩子，他们把他们分成两组。

One group was given a drink containing common food additives that appear regularly in our diets, and the other group was given a drink that didn't contain them. They were then monitored to see how they behaved.

一组喝的是含有我们饮食中经常出现的常见食品添加剂的饮料，另一组喝的是不含这些添加剂的饮料。然后他们受到监控，看看他们的行为如何。

The kids who drank the food dyes were significantly more likely to become hyperactive.

喝了食用色素的孩子明显更容易变得多动。

The evidence for this was strong and decisive enough that in the aftermath of this discovery, many European countries banned these dyes – but the US regulators refused to, and they are still being consumed every day in some of the country's most popular cereals and snacks.

这一发现的证据足够有力和决定性，以至于在这一发现之后，许多欧洲国家禁止了这些染料，但美国监管机构拒绝这样做，而且它们仍然每天在该国一些最受欢迎的谷物和零食中食用。

I wondered if this could help to explain some of the gap in ADHD rates between Europe and the US.

我想知道这是否有助于解释欧洲和美国之间 ADHD 发病率的一些差异。

Dale told me that if you want to understand what's really going on here, you should look out across the world at the places where people are physically and mentally fitter than us, with lower levels of diagnosed ADHD and dementia.

戴尔告诉我，如果你想了解这里到底发生了什么，你应该看看世界各地的人们在身体和精神上都比我们更健康，诊断出多动症和痴呆症的水平较低。

If you do that, he said, at first it'll seem puzzling, because the diets

they eat are actually very different – some of them are heavy on fish, some have very little fish; some have a lot of plants, some don't have many plants; some have lots of carbohydrates and some have none at all.

他说，如果你这样做，一开始会显得令人费解，因为他们吃的食物实际上非常不同——有些人吃鱼很多，有些人吃鱼很少；有些人吃鱼很少。有的植物很多，有的植物不多；有些含有大量碳水化合物，有些则根本不含碳水化合物。

If you're looking for a magic ingredient, you won't find it. But 'there's one thing that unifies every single one of them. They're all leaving out the crap that's making us sick in the first place.

如果您正在寻找一种神奇的成分，您将找不到它。但‘有一样东西将他们每一个人统一起来。他们都忽略了那些让我们生病的垃圾。

They're all leaving out the refined carbohydrates, the processed food, the junk oils.

他们都忽略了精制碳水化合物、加工食品和垃圾油。

They're all building their foundations on whole foods ... That's the key. That's the magic bullet – just go back to whole foods. Foods as they were originally intended.' He quoted Michael Pollan, who says we should eat only food that our grandparents would have recognised as food, and we should shop primarily around the outer edges of the supermarket – the fruit and veg at the front, and the meat and fish at the back. The stuff in the middle, he warned, isn't really food at all.

他们都在以天然食品为基础.....这是关键。这就是灵丹妙药——回归全食。他引用了迈克尔·波伦的话，他说我们应该只吃祖父母认为是食物的食物，我们应该主要在超市的外缘购物——前面的水果和蔬菜，还有后面的肉和鱼。他警告说，中间的东西根本不是真正的食物。

Yet instead of promoting healthy food to children, we often push the worst food on them. In Boston another nutritional psychiatrist, Dr Umadevi Naidoo, told me that a few years before, the funding for school lunches in the US had been cut, and ‘the food companies moved in and provided vending machines’.

然而，我们不是向儿童推销健康食品，而是经常向他们推销最糟糕的食物。在波士顿，另一位营养精神病学家 Umadevi Naidoo 博士告诉我，几年前，美国学校午餐的资金被削减，“食品公司搬进来并提供自动售货机”。

Now, ‘the obvious connection is that if they’re getting candy bars and cookies, which were processed’, there will ‘definitely’ be a link to the rise in attention problems in children. These reasons – and many more – are why Professor Joel Nigg, the ADHD expert I interviewed in Portland, has written: ‘A sea change is under way ... If you think your child’s ADHD may have something to do with food, science now agrees with you.’

现在，“明显的联系是，如果他们得到的是经过加工的棒棒糖和饼干”，那么“肯定”与儿童注意力问题的增加有关。这些原因以及更多原因，就是我在波特兰采访的多动症专家乔尔·尼格教授写道：“巨大的变化正在发生.....如果你认为你的孩子的多动症可能与食物有关，那么科学现在同意这一观点。”你。’



I liked all the people I was meeting – but part of me felt really uncomfortable as I had these conversations. So many of my emotions are tied up with the foods that they were explaining to me are focus-killers. I was raised to find comfort in unhealthy food.

我喜欢我遇到的所有人——但当我进行这些谈话时，我内心的一部分感到非常不舒服。我的很多情绪都与他们向我解释的食物有关，这些食物是注意力杀手。我从小就是为了在不健康的食物中寻找安慰而长大的。

I pine for it when I feel down. As I reflected on how this diet might be affecting me, I started to think again about my time in Provincetown. There are no fast-food chains there – no McDonald’s! No KFC! Not even Burger King! There’s only a single pizza place, Spiritus Pizza. So for three months, I ate almost nothing but healthy, fresh food – which

is two months and thirty days longer than at any other point in my life, other than those long Swiss summers.

当我心情低落时，我会渴望它。当我反思这种饮食可能如何影响我时，我开始再次思考我在普罗温斯敦的时光。那里没有快餐连锁店——没有麦当劳！没有肯德基！连汉堡王都没有！这里只有一家披萨店，Spiritus Pizza。因此，在三个月的时间里，除了瑞士漫长的夏季之外，我几乎只吃健康、新鲜的食物——这比我生命中的任何其他时刻都要长两个月零三十天。

I wondered if that, too, had played a role in why I focused so easily and so well there.

我想知道这是否也是我在那里如此轻松、如此集中注意力的原因之一。

As I investigated all this, I kept thinking about the last time I ever saw my Swiss grandmother. She was in her mid-eighties, and we walked up her mountain together, with her walking faster than me.

当我调查这一切时，我一直在回想我最后一次见到我的瑞士祖母是什么时候。她八十多岁了，我们一起爬她的山，她走得比我快。

She led me into her huge garden, and she tended to it – ripping out weeds, observing the progress of her carrots and leeks – while her chickens scratched freely all around us. Then, with brisk hand movements, she picked out the food we were going to eat together that night, and I watched her cook it. To her, this was as natural as breathing. To me, I realise now, it should have been a revelation.

她带我走进她的大花园，她负责照顾它——拔掉杂草，观察胡萝卜和韭菜的生长情况——而她的鸡则在我们周围自由地抓食。然后，她以轻快的动作挑出了那天晚上我们要一起吃的食物，我看着她做饭。对她来说，这就像呼吸一样自然。对我来说，我现在意识到，这应该是一个启示。

Yet I can imagine presenting this evidence to people in a way that reeks of cruel optimism. You can picture Instagram influencers taking these points and posting: Look! Just change what you eat and your focus will return! I did it! Now you can too! But the truth is that this is – like so much of what I was learning about for this book – primarily a structural problem.

然而我可以想象以一种残酷乐观的方式向人们展示这些证据。您可以

想象 Instagram 影响者采纳这些观点并发帖：看！只要改变你吃的东西，你的注意力就会恢复！我做到了！现在你也可以了！但事实是，就像我在本书中学到的很多内容一样，这主要是一个结构性问题。

Nobody I know has a mountain and a farm like my grandparents did – they have to get their food at supermarkets. Those supermarkets are full of cheap processed food which is promoted to us from the moment we are born by enormous advertising budgets. If we are going to overcome this problem, there is some role for each of us making individual changes, but there's a bigger need to deal with the larger forces behind it. Today, just like – as Tristan had taught me – every time you try to put down your phone there's a thousand engineers behind the screen trying to get you to pick it up again, every time you try to give up processed food, there's a team of expert marketers trying to get you to crack and come back to it.

我认识的人中没有人像我的祖父母一样拥有一座山和一个农场——他们必须在超市购买食物。那些超市里充满了廉价的加工食品，从我们出生的那一刻起，这些食品就被巨额广告预算推销给我们。如果我们要克服这个问题，我们每个人都可以做出一些个人改变，但更需要应对背后更大的力量。今天，就像特里斯坦教我的那样，每次你试图放下手机时，屏幕后面都有一千名工程师试图让你再次拿起它，每次你试图放弃加工食品时，都会有一个团队专家营销人员试图让你破解并重新开始。

From long before you were even consciously aware of it, they have been working at getting you to associate positive feelings with unhealthy food. They programmed me perfectly to feed their profit margins rather than my brain health, and I'm not alone.

早在您有意识地意识到这一点之前，他们就一直在努力让您将积极的情绪与不健康的食物联系起来。他们对我进行了完美的编程，以满足他们的利润率，而不是我的大脑健康，而且我并不孤单。

That machinery needs to be turned off, so it can't distort the tastes and steal the focus of another generation.

这种机器需要关闭，这样它就不能扭曲品味并抢走下一代人的注意力。

The next cause of our attention crisis is, out of all the factors I have written about in this book, potentially the biggest. We all know that being exposed to pollution and to industrial chemicals – in the air, or on the products we buy – is bad for us. If you'd asked me when I started researching this book, I could have explained to you, in pretty basic terms, that air pollution causes asthma and other breathing problems, for example. But I was startled to learn that there is growing evidence suggesting that this pollution is seriously damaging our ability to focus.

我在本书中所写的所有因素中，我们注意力危机的下一个原因可能是最大的。我们都知道，接触空气中或我们购买的产品中的污染和工业化学品对我们有害。如果你问我什么时候开始研究这本书，我可以用非常基本的术语向你解释，例如，空气污染会导致哮喘和其他呼吸问题。但我惊讶地发现，越来越多的证据表明这种污染正在严重损害我们的注意力。

To understand this, I read widely about the science surrounding this question, and I interviewed scientists who have been at the cutting edge of discovering these effects. Professor Barbara Demeneix – a prestigious scientist in France who has won several major awards, including the Légion d'honneur, the country's highest civilian prize – explained to me: 'At every stage of your life, different forms of pollution will affect your attention span,' and she has concluded this is a factor in why 'we've got neurodevelopmental disease increasing exponentially ... [including] ADHD across the board.' She said that we are now surrounded by so many pollutants that 'there is no way we can have a normal brain today'.

为了理解这一点，我广泛阅读了围绕这个问题的科学知识，并采访了处于发现这些效应前沿的科学家。法国著名科学家芭芭拉·德梅内克斯 (Barbara Demeneix) 教授曾荣获多项重要奖项，其中包括法国最高民间奖项——荣誉军团勋章 (Légion d'honneur)，她向我解释道：“在你人生的每个阶段，不同形式的污染都会影响你的注意力持续时间，”她得出的结论是，这就是为什么“我们的神经发育疾病呈指数级增长……[包括]多动症。”她说，我们现在被如此多的污染物包围，“我们没有办法今天有一个正常的大脑”。

The form of pollution we, as ordinary citizens, know most about is in the air all around us, so I interviewed Barbara Maher, who is a professor of environmental science at the University of Lancaster in England, and has been carrying out potentially game-changing

research on how it is affecting our brains.

作为普通公民，我们最了解的污染形式是在我们周围的空气中，因此我采访了英国兰开斯特大学环境科学教授芭芭拉·马赫（Barbara Maher），她一直在进行潜在的博弈——改变关于它如何影响我们大脑的研究。

She explained to me that if you live in a major city today, every day you are breathing in a chemical soup – a mixture of many different contaminants, including those spewed from car engines.

她向我解释说，如果你今天生活在大城市，你每天都会吸入化学汤——许多不同污染物的混合物，包括汽车发动机喷出的污染物。

Your brain did not evolve to absorb these chemicals, like iron, through the respiratory system, and it doesn't know how to handle them.

你的大脑没有进化到可以通过呼吸系统吸收这些化学物质，比如铁，而且它也不知道如何处理它们。

So just by living in a polluted city, she said, you are experiencing a 'repeated chronic insult to your brain', and it will react by becoming inflamed.

她说，因此，只要生活在一个被污染的城市，你就会经历“对你的大脑的反复慢性伤害”，它会通过发炎来做出反应。

I asked her: what happens if that goes on for months and years? She said it 'is going to lead to damage to the nerve cells, to the neurons. Depending on the dose [i.e.

我问她：如果这种情况持续数月甚至数年会怎样？她说这“会导致神经细胞、神经元受损”。取决于剂量[即

how bad the pollution is], depending on your genetic susceptibility, eventually, over time, your brain cells will be damaged.'

污染有多严重]，取决于您的遗传易感性，最终，随着时间的推移，您的脑细胞将受到损害。

She has found that the worse the pollution, the worse the damage to

your brain. After soaking up this damage for years, you are more likely to develop one of the worst forms of brain degeneration, dementia. In Canada, a study found that people who live within fifty metres of a major road were 15 percent more likely to develop dementia than people who didn't. But I asked Barbara: What does that inflammation do to your mental functioning earlier in life? 'It's probable that if there's a chronic impact, that can cause aggression, loss of control, attention deficit.'

她发现污染越严重，对大脑的损害就越严重。在承受这种损害多年后，您更有可能患上最严重的大脑退化形式之一——痴呆症。在加拿大，一项研究发现，居住在距主干道 50 米范围内的人比居住在距主干道 50 米以内的人患痴呆症的可能性比其他人高出 15%。但我问芭芭拉：这种炎症对你早年的心理功能有什么影响？“如果存在长期影响，很可能会导致攻击性、失控、注意力缺陷。”

The evidence is especially worrying when it comes to children's brains, which are still developing, she said. 'We've now seen evidence for the onset of these degenerative diseases in really, really young children in highly polluted environments.

她说，当涉及到仍在发育的儿童大脑时，这些证据尤其令人担忧。“我们现在已经看到了这些退行性疾病在高度污染环境中的非常非常小的儿童中发病的证据。

That's your next generation ... My colleague in Mexico [has] been doing MRI scans, and they can already see shrinking volumes of brain tissue in badly affected young people.' The more polluted an area is, the worse the harm – to the point where some have 'lesions.

那是你的下一代……我在墨西哥的同事一直在做核磁共振扫描，他们已经可以看到受到严重影响的年轻人的脑组织体积萎缩。”一个地区污染越严重，危害就越严重——以至于有些有“病变”。

You can actually see plaques and tangles [in the brain, as in dementia patients], even in very young cases.' A scientist in Barcelona, Professor Jordi Sunyer, tested school children's ability to pay attention across the city – and found that the worse the pollution, the worse the kids performed.

事实上，即使是在非常年轻的病例中，你也可以在[大脑中，如痴呆症患者]看到斑块和缠结。”巴塞罗那的一位科学家乔迪·桑耶尔教授测试了

全市学童的注意力集中能力，发现情况越差污染越严重，孩子们的表现就越差。

This seemed really daunting. It told me there's a focus-killer literally all around us, and I felt overwhelmed. How can we fight it? I began to get some clues once I had learned some history. I started by looking at the effect of one specific pollutant on our attention: lead. As far back as ancient Rome, it was known that lead was poisonous to human beings. The architect Vitruvius, for example, begged the Roman authorities to not use it to build the city's pipes.

这看起来确实令人畏惧。它告诉我，我们周围确实存在一个注意力杀手，我感到不知所措。我们怎样才能对抗它呢？当我了解了一些历史后，我开始得到一些线索。我首先研究了一种特定污染物对我们注意力的影响：铅。早在古罗马，人们就知道铅对人类有毒。例如，建筑师维特鲁威请求罗马当局不要用它来建造城市的管道。

Yet for centuries lead was used to paint homes and in water pipes, and then in the early twentieth century it was added to petrol, which meant it was pumped into the air of every city in the world and breathed in by its inhabitants.

然而，几个世纪以来，铅一直被用来粉刷房屋和水管，然后在二十世纪初，它被添加到汽油中，这意味着它被泵入世界上每个城市的空气中，并被居民吸入。

Scientists warned almost at once that leaded gasoline was likely to produce disaster. When in 1925 General Motors announced that putting lead in gasoline was a 'gift of God', its CEO was warned by Dr Alice Hamilton, the leading expert on lead in the US, that he was playing with fire.

科学家们几乎立即警告说，含铅汽油可能会造成灾难。1925年，当通用汽车公司宣布在汽油中添加铅是“上帝的礼物”时，美国领先的铅专家爱丽丝·汉密尔顿 (Alice Hamilton) 博士警告该公司首席执行官，他是在玩火。

'Where there is lead,' she said, 'some case of lead poisoning sooner or later develops.' It was clear this could have a terrible effect on people's brains: in high doses, lead poisoning makes people hallucinate, lose their minds or die.

“只要有铅，”她说，“迟早会发生铅中毒。”很明显，这可能会对人们的大脑产生可怕的影响：高剂量的铅中毒会使人产生幻觉、失去理智或死亡。

The factories where leaded petrol was developed had outbreaks of staff members going violently insane and dying because of their exposure to it.

生产含铅汽油的工厂曾多次发生员工因接触含铅汽油而严重精神错乱甚至死亡的情况。

There was always a non-leaded form of gasoline available that didn't carry these risks, but the big corporations resisted it fiercely, seemingly for a commercial reason: they could patent the leaded version, and so make more money from it.

总有一种无铅汽油可以避免这些风险，但大公司强烈抵制，似乎是出于商业原因：他们可以为含铅汽油申请专利，从而从中赚更多钱。

For forty years, the lead industry funded all the scientific research into whether it was safe – and assured the world that their scientists had discovered it was.

四十年来，铅工业资助了所有科学研究，以确定其是否安全，并向世界保证，他们的科学家已经发现了它的安全性。

It turns out this decision to allow leaded petrol to dominate the market stole a large amount of focus from people all over the world. I went to interview Bruce Lanphear, who is professor of health sciences at Simon Fraser University in Canada. He explained that as a young academic in the 1980s, he was offered a position in Rochester in upstate New York to study the effects of lead on children's cognitive abilities.

事实证明，允许含铅汽油主导市场的决定吸引了世界各地人们的大量关注。我去采访了加拿大西蒙弗雷泽大学健康科学教授布鲁斯·兰菲尔（Bruce Lanphear）。他解释说，作为 20 世纪 80 年代的年轻学者，他在纽约州北部的罗彻斯特获得了一个职位，研究铅对儿童认知能力的影响。

He knew that kids were still being exposed to a lot of lead, even

though leaded paint had been banned in 1978, because millions of people still lived in homes full of it, and leaded petrol continued to be used everywhere. He wanted to know what this was doing to them.

他知道，尽管含铅油漆已于 1978 年被禁止，但孩子们仍然接触到大量的铅，因为数百万人仍然生活在充满铅的家庭中，而且到处都继续使用含铅汽油。他想知道这对他们造成了什么影响。

As part of the project he worked with, all the kids in Rochester were given blood tests to see just how much lead they were carrying in their bodies. When Bruce saw the results, he was taken aback. One in three of the children in the town had lead poisoning.

作为他参与的项目的一部分，罗切斯特的所有孩子都接受了血液检查，以了解他们体内的铅含量。当布鲁斯看到结果时，他大吃一惊。该镇三分之一的儿童铅中毒。

For Black children, it was one in two. Rochester wasn't unusual – separate research a few years before found that modern Americans by the 1970s were carrying more than 600 times more lead in their bodies than pre-industrial humans, and the Environmental Protection Agency estimates that 68 million children were exposed to toxic levels of lead in the US from leaded petrol alone between 1927 and 1987.

对于黑人儿童来说，这一比例是二分之一。罗彻斯特的情况并不罕见——几年前的独立研究发现，到 20 世纪 70 年代，现代美国人体内的铅含量是工业化前人类的 600 倍以上，环境保护局估计有 6800 万儿童接触有毒物质 1927 年至 1987 年间美国仅含铅汽油中的铅含量。

Bruce and other scientists showed that lead severely stunts your ability to focus and pay attention. If you are exposed to lead as a child, he explained to me, you are 'two and a half times more likely to meet criteria for ADHD.' The effect becomes even bigger if it is combined with other forms of pollution. For example, if your mother was exposed to lead during pregnancy and she smoked cigarettes, you are *eight* times more likely to be diagnosed with ADHD.

布鲁斯和其他科学家表明，铅会严重阻碍你集中注意力的能力。他向我解释说，如果你小时候接触过铅，你“符合多动症标准的可能性会增加两倍半”。如果与其他形式的污染结合起来，这种影响会变得更大。例如，如果您的母亲在怀孕期间接触铅并且吸烟，您被诊断出患有多动症的可能性会增加八倍。

Before Bruce arrived, the mothers of Rochester – like mothers across the United States — had been warned about the dangers of lead poisoning, and then told that it was their fault.

在布鲁斯到达之前，罗切斯特的母亲们——就像美国各地的母亲们一样——被警告铅中毒的危险，然后又被告知这是她们的错。

The authorities said to them – your kids are being exposed in this way because, as mothers, you have failed to dust your homes enough. Do more housework and get your kids to wash their hands more.

当局对她们说——你们的孩子之所以受到这样的影响，是因为作为母亲，你们没有及时打扫家里的灰尘。多做家务，让孩子多洗手。

This was part of a wider push: the lead industry itself claimed the problem lay mainly with ‘uneducable Negro and Puerto Rican’ parents who ‘failed’ to protect their kids from the lead in their homes.

这是更广泛推动的一部分：铅行业本身声称问题主要在于“无法受教育的黑人和波多黎各人”父母，他们“未能”在家中保护孩子免受铅侵害。

But when Bruce studied it, he found that all this dusting and handwashing made no difference at all. He could see that a whole town, and a whole generation of children, had been poisoned, and the families had been told it was down to them because they weren’t clean enough.

但当布鲁斯研究它时，他发现所有这些除尘和洗手根本没有任何区别。他可以看到整个城镇和整整一代的孩子都被毒害了，而这些家庭被告知这是他们的责任，因为他们不够干净。

Some scientists had gone even further in blaming the victims. They said the problem wasn’t that the families were living with high levels of a brain-damaging metal, but that the children had a mental illness.

一些科学家甚至进一步指责受害者。他们说，问题不在于这些家庭生活高浓度的损害大脑的金属中，而在于孩子们患有精神疾病。

They said the kids had a psychological disorder named ‘pica’, which was making toddlers irrationally stick chunks of lead paint in their

mouths.

他们说，孩子们患有一种名为“异食癖”的心理障碍，这种疾病会让幼儿不合理地将大块含铅油漆放入嘴里。

These children were labelled as having a ‘perverted appetite’, and it was (again) claimed that this problem seemed to be suffered mainly by Black and Brown children.

这些孩子被贴上“食欲不振”的标签，并且（再次）声称这个问题似乎主要是黑人和棕色人种的孩子遭受的。

At every stage, right from the 1920s onwards, the lead industry created and encouraged these diversionary tactics. They also bought the loyalty of some scientists, who systematically cast doubt on the evidence that lead harmed people’s brains.

从 20 年代起，铅工业在每个阶段都创造并鼓励这些转移策略。他们还收买了一些科学家的忠诚，这些科学家系统地对铅损害大脑的证据提出了质疑。

Right at the start, in the 1920s, one scientist, named Thomas Midgley, announced at a press conference that it was perfectly safe to use leaded products. He didn’t tell the gathered journalists he had just recovered from a terrible dose of lead poisoning himself, caused by the very products he was now promoting.

20 世纪 20 年代初期，一位名叫托马斯·米奇利 (Thomas Midgley) 的科学家在新闻发布会上宣布，使用含铅产品是完全安全的。他没有告诉聚集在一起的记者，他自己刚刚从严重的铅中毒中恢复过来，而铅中毒正是由他现在推销的产品引起的。

At every stage, the lead industry insisted, in effect – if there is any doubt about the danger, we should be allowed to carry on pumping lead into people’s bodies.

实际上，铅行业在每个阶段都坚持——如果对危险有任何疑问，我们应该被允许继续将铅注入人们的身體。

All through the research for this book, I had an ongoing struggle to hold clearly in my mind the structural nature of our attention crisis. We live in an extremely individualistic culture, where we are

constantly pushed to see our problems as individual failings, and to seek out individual solutions. You're unable to focus? Overweight? Poor? Depressed? We are taught in this culture to think: That's my fault.

在本书的研究过程中，我一直在努力清楚地记住注意力危机的结构性质。我们生活在一种极端个人主义的文化中，我们不断地被迫将我们的问题视为个人的失败，并寻求个人的解决方案。你无法集中注意力？超重？贫穷的？郁闷？在这种文化中，我们被教导要思考：那是我的错。

I should have found a personal way to lift myself up and out of these environmental problems. Now, whenever I feel that way, I think about the mothers in Rochester whose kids were being poisoned by lead, and they were simply told they should dust their homes more, or that their kids had a 'perverted' desire to suck on chunks of lead paint.

我应该找到一种个人方式来提升自己并摆脱这些环境问题。现在，每当我有这种感觉时，我都会想起罗切斯特的那些孩子被铅中毒的母亲们，她们只是被告知应该多打扫家里的灰尘，或者她们的孩子有一种“变态”的欲望去吮吸大块的铅。含铅油漆。

We can see clearly now there was a huge problem with a deep cause in the environment – and yet the primary response was to tell people to throw all their energy into a frantic individual displacement activity that made no difference at all, or (even worse) to blame their own poisoned children.

我们现在可以清楚地看到，环境中存在一个具有深层次原因的巨大问题——然而，主要的反应是告诉人们将所有精力投入到疯狂的个人迁移活动中，这根本没有任何影响，或者（甚至更糟）归咎于自己被毒害的孩子。

When the problem was blamed on isolated individuals, and they were told to solve it by simply tweaking their own behaviour, the problem only got worse. So I investigated – what did end it? I learned it was one thing, and one thing only.

当问题被归咎于孤立的个人，并被告知只需调整自己的行为即可解决问题时，问题只会变得更糟。所以我调查了——是什么结束了这一切？我了解到这是一件事，而且只是一件事。

It stopped when ordinary citizens learned the scientific evidence and banded together to demand their governments change the law to stop these companies from poisoning them. In Britain, for example, the campaign against leaded petrol was led by a housewife named Jill Runnette, who succeeded in getting the government to cut the amount of lead in petrol by two-thirds in 1981. (It was later banned altogether.) She did it to protect herself and the children of her society.

当普通公民了解到科学证据并联合起来要求政府修改法律以阻止这些公司毒害他们时，这种情况就停止了。例如，在英国，一位名叫吉尔·朗内特 (Jill Runnette) 的家庭主妇领导了反对含铅汽油的运动，她成功地让政府于 1981 年将汽油中的含铅量减少了三分之二。（后来完全禁止了。）这样做是为了保护自己和社会的孩子。

In a way, this felt to me like a metaphor for our whole attention crisis.

在某种程度上，这对我来说就像是整个注意力危机的隐喻。

Our attention and focus has been raided, pillaged and poisoned by huge external forces – and we have been told to do the equivalent of dusting our homes and washing our hands more, when we should have been doing the equivalent of banning lead paint and petrol all along.

我们的注意力和焦点已经被巨大的外部力量袭击、掠夺和毒害——我们被告知要做相当于打扫房屋、多洗手的事情，而我们本应该做相当于全面禁止含铅油漆和汽油的事情。沿着。

In many ways, the story of resistance to lead poisoning is a model for us to follow now. The dangers were clear for decades – Dr Alice Hamilton accurately documented them in the mid-1920s – but things only changed when there was a dedicated democratic movement of ordinary citizens taking on the forces that stole their focus. In 1975 the average Americans had a blood lead level of 15 micrograms per decilitre. Today it's 0.85 micrograms per decilitre. The IQ of the average pre-schooler is estimated by scientists at the US Centers for Disease Control and Prevention to have risen by five points as a result of the ban. It's proof that it's possible to make dramatic progress on

fighting an attention-killer.

从很多方面来说，抵抗铅中毒的故事都是我们现在可以效仿的榜样。几十年来，危险一直是显而易见的——爱丽丝·汉密尔顿博士在 1920 年代中期准确地记录了这些危险——但只有当普通公民发起一场专门的民主运动，对抗那些夺走他们注意力的力量时，情况才发生了变化。1975 年，美国人的平均血铅含量为每分升 15 微克。如今，其含量为每分升 0.85 微克。美国疾病控制与预防中心的科学家估计，由于禁令的实施，学龄前儿童的平均智商提高了五个百分点。这证明在对抗注意力杀手方面是有可能取得巨大进展的。



But Barbara Demeneix warned me that since then, ‘there are so many other [attention-damaging] chemicals that ... are increasing on the market’ that she fears it is now dwarfing the benefit of ditching lead.

但芭芭拉·德梅内克斯 (Barbara Demeneix) 警告我，从那时起，“市场上有太多其他[损害注意力的]化学物质.....正在增加”，她担心现在放弃铅的好处相形见绌。

So I asked her – what chemicals are we being exposed to today that have potential effects on attention? ‘Let’s start with the main culprits: pesticides. Plasticisers. Flame-retardants.

所以我问她——我们今天接触到的哪些化学物质会对注意力产生潜在影响？“让我们从罪魁祸首开始：农药。增塑剂。阻燃剂。

Cosmetics.’ She said ‘of over two hundred pesticides on the market in Europe, about two-thirds affect either brain development or thyroid hormone signalling’. When monkeys are exposed to the same level of the common pollutant polychlorinated biphenyls (PCBs) as humans currently are, they develop serious problems with their working memory and mental development. A team of scientists studied the amount of a pollutant named bisphenol A, or BPA – which is used to coat 80 percent of metal cans – that mothers are exposed to. They found that exposure to the chemical predicts which of them will have kids with behaviour problems.

化妆品。”她说，“在欧洲市场上的 200 多种农药中，大约三分之二会影响大脑发育或甲状腺激素信号”。当猴子接触与人类目前相同水平的常见污染物多氯联苯 (PCB) 时，它们的工作记忆和智力发育会出现严重问

题。一组科学家研究了母亲接触的一种名为双酚 A (BPA) 的污染物的含量，这种污染物用于覆盖 80% 的金属罐。他们发现，接触这种化学物质可以预测哪些人的孩子会出现行为问题。

Barbara has been engaged for nearly twenty years in developmental neurotoxicity testing – the science that figures out how the chemicals we are exposed to, both on the products that we buy and in the food that we eat, affect the development of foetuses and babies.

芭芭拉从事发育神经毒性测试近二十年，这是一门研究我们所接触的化学物质（无论是在我们购买的产品还是在吃的食物中）如何影响胎儿和婴儿发育的科学。

She was commissioned by the European Parliament to do major research on this question, and she has co-ordinated many other research projects – and in the course of her research, there was one area in particular that worried her most.

她受欧洲议会委托对这一问题进行重大研究，并协调了许多其他研究项目——在她的研究过程中，有一个领域让她最担心。

She explained to me that from the moment you are conceived, your development is shaped by hormones, which ‘regulate early development’. So she began to research whether these chemicals have any effect on these endocrine signals. What she discovered is that many of them create an effect that’s like ‘radio interference’, screwing with the system that guides how a human should develop, especially the brain, and making parts of it go astray. This affects attention, she explained, because this whole system guides how a person’s brain will develop. If your brain doesn’t develop normally, your attention can seriously suffer.

她向我解释说，从受孕的那一刻起，您的发育就受到激素的影响，激素“调节早期发育”。于是她开始研究这些化学物质是否对这些内分泌信号有影响。她发现，其中许多都会产生类似“无线电干扰”的效果，扰乱指导人类如何发展的系统，尤其是大脑，并使其某些部分误入歧途。她解释说，这会影响注意力，因为整个系统指导着一个人的大脑如何发育。如果你的大脑发育不正常，你的注意力就会受到严重影响。

Between 2005 and 2012, she tested many common substances that are all around us – and the more substances her team tested, the more evidence she gathered that the endocrine system is being messed with

by our current environment.

2005 年至 2012 年间，她测试了我们周围的许多常见物质 - 她的团队测试的物质越多，她收集到的证据就越多，表明我们当前的环境正在扰乱内分泌系统。

She warns that all children today are being born ‘precontaminated’ by a ‘toxic cocktail’.

她警告说，今天所有的孩子出生时都受到“有毒鸡尾酒”的“预先污染”。

This is disputed: some scientists believe that these dangers are being hugely overstated. For example, the American Council of Science and Health has ridiculed Barbara’s claims, arguing that you would have to be exposed to a massive dose of some of these chemicals for them to have the effects she describes. According to *Mother Jones* magazine, this group has allegedly been funded by chemical companies and large agricultural corporations with a vested interest in this debate (although the group denies these claims), which means we should handle their scepticism with some scepticism of our own – but it doesn’t necessarily mean they are wrong.

这是有争议的：一些科学家认为这些危险被过分夸大了。例如，美国科学与健康委员会嘲笑了芭芭拉的说法，认为你必须接触大量的这些化学物质才能产生她所描述的效果。据《琼斯母亲》杂志报道，该组织据称得到了在这场辩论中拥有既得利益的化学公司和大型农业公司的资助（尽管该组织否认了这些说法），这意味着我们应该以我们自己的怀疑态度来应对他们的怀疑——但是这并不一定意味着他们错了。

There needs to be more funding to study these questions in detail.

需要更多的资金来详细研究这些问题。

It sometimes seems like the same story that played out with lead is now happening with other attention-damaging chemicals.

有时，铅上演的同样的故事现在也发生在其他有损注意力的化学物质上。

The industries that profit from using them fund the vast majority of the research into them; they systematically promote doubt about the

possible harms; and they argue that if there's any doubt at all about the danger of their products, they should be allowed to carry on using them.

从使用它们中获利的行业资助了绝大多数的研究；他们系统性地引发人们对可能造成的危害的怀疑；他们认为，如果对其产品的危险有任何疑问，就应该允许他们继续使用它们。

I felt tempted, when I heard all this, to keep asking the scientists I interviewed: Okay, what products contain these pollutants, and how do I cut them out of my life? You say BPA coats metal cans – should I avoid metal cans?

当我听到这一切时，我很想继续问我采访的科学家：好吧，哪些产品含有这些污染物，我该如何将它们从我的生活中剔除？你说 BPA 会覆盖金属罐——我应该避免使用金属罐吗？

But Barbara Demeneix told me that trying to personally avoid pollutants today, at an individual level, is largely a fool's errand in a landscape so filled with them. 'We can eat bio [i.e. organic]. We can air our homes as often as possible.

但芭芭拉·德梅内克斯告诉我，在当今充满污染物的环境中，在个人层面上试图亲自避免污染物在很大程度上是徒劳的。“我们可以吃生物[即有机的]。我们可以尽可能多地给家里通风。

[We can] live in the countryside.' But when it comes to these endocrine disruptors, 'there's no escape. There's no escape.' Not at the level of the isolated individual.

[我们可以]生活在乡村。”但是当谈到这些内分泌干扰物时，“我们无法逃避。没有逃脱的余地。”但不是在孤立的个人层面上。

To understand what we can actually do to solve the damage pollution is doing to our attention, I went to meet up with Bruce Lanphear by the rocks in Horseshoe Bay, on the West Coast of Canada, on a foggy day. He had just been out kayaking, and in the water in front of us, there were seals flapping around and vanishing under the waves. 'Look at that,' he said. 'The clouds. The water.

为了了解我们实际上可以做些什么来解决污染对我们造成的损害，我在一个大雾天去加拿大西海岸马蹄湾的岩石旁与布鲁斯·兰菲尔会面。他

刚刚出去划皮划艇，在我们面前的水中，有海豹在拍动翅膀，消失在海浪之下。“看看那个，”他说。‘云。水。

The greenery.’

绿色植物。

From our conversation, I learned that there were two ways we need to respond now. Firstly, when it comes to new chemicals, we need a new approach. He told me that at the moment, ‘chemicals are assumed to be innocent until study after study shows they’re toxic’.

从我们的谈话中，我了解到我们现在需要有两种回应方式。首先，当涉及新化学品时，我们需要一种新方法。他告诉我，目前，“化学物质被认为是无害的，直到一项又一项的研究表明它们是有毒的”。

So if you want to put a product on the market containing a new chemical, you can use whatever you want, and, in the years that follow, poorly funded scientists have to scramble to figure out if it’s safe. ‘That’s because who’s calling the shots?

因此，如果你想将一种含有新化学物质的产品投放市场，你可以使用任何你想要的东西，而在接下来的几年里，资金匮乏的科学家们必须努力弄清楚它是否安全。‘那是因为谁在发号施令？

Industry.’ We need to do it differently, he said. ‘Basically, we should treat new chemicals, new pollutants, as though they are like drugs.’ The chemical should have to be tested for safety *before* it starts being used by ordinary people – and only if it passes stringent tests should it end up in your home and in your bloodstream.

工业。”我们需要采取不同的做法，他说。“基本上，我们应该像对待药物一样对待新化学品、新污染物。”这种化学品在开始被普通人使用之前应该经过安全性测试——只有通过严格的测试，它才能最终进入市场。你的家和你的血液中。

Second, for the chemicals that are already widely used, we need to do these tests, and this research needs to be carried out by scientists who are not funded by industry.

其次，对于已经广泛使用的化学品，我们需要做这些测试，而这项研究需要由不受工业资助的科学家来进行。

Then, if we discover that any of them are harmful, we need to band together as citizens and demand that it be prohibited, like lead is – finally – today. Later, Barbara Demeneix told me bluntly: ‘We’ve got to get this under control very soon.’

然后，如果我们发现其中任何一种有害，我们需要作为公民团结起来并要求禁止它，就像今天的铅一样。后来，芭芭拉·德梅内克斯（Barbara Demeneix）直言不讳地告诉我：“我们必须尽快控制住局面。”

Barbara Maher told me that when it comes to her area of expertise, air pollution, we need to pressure our governments to bring forward the transition to electric cars by law, because they massively reduce this problem.

芭芭拉·马赫告诉我，当谈到她的专业领域——空气污染时，我们需要向我们的政府施压，要求他们依法推进向电动汽车的过渡，因为它们可以大大减少这个问题。

She stressed, in addition, that there are interim steps we can push our leaders to take: if we plant trees in pollution hotspots, they will soak up a lot of the contamination, and clean the air of many toxins.

此外，她还强调，我们可以敦促我们的领导人采取一些临时措施：如果我们在污染热点地区种植树木，它们将吸收大量污染物，并清除空气中的许多毒素。



As I absorbed all this, I kept thinking about what Barbara Demeneix said to me: ‘There is no way we can have a normal brain today.’ It’s possible that a hundred years from now, when they look back at us and ask why we struggled to pay attention, they will say, ‘They were surrounded by pollutants and chemicals that inflamed their brains and harmed focus.’

当我吸收这一切时，我一直在思考芭芭拉·德梅内克斯对我说的话：“今天我们不可能有一个正常的大脑。”可能一百年后，当他们回顾我们并问为什么我们当他们难以集中注意力时，他们会说，“他们周围都是污染物和化学物质，这些污染物和化学物质会刺激他们的大脑并损害注意力。”

They walked around exposed to BPA and PCBs, and breathing in metals. Their scientists knew what it did to their brains and their ability to focus.

他们四处走动，接触双酚 A 和多氯联苯，并吸入金属。他们的科学家知道这对他们的大脑和他们的专注能力有何影响。

Why were they surprised they struggled to pay attention?’ Those people in the future will know whether, after learning this, we banded together to protect our brains – or whether we allowed them to continue to degrade.

为什么他们对自己难以集中注意力感到惊讶？”未来的人们会知道，在了解这一点后，我们是否联合起来保护我们的大脑，或者我们是否允许它们继续退化。

Cause Eleven: The Rise of ADHD and How We Are Responding to It

13

13 原因十一：多动症的兴起以及我们如何应对

Something strange started to happen around fifteen years ago, when my nephews were small. Their teachers believed that large numbers of kids in their classes were becoming more restless and unable to focus. They didn't want to sit still or attend to their lessons.

大约十五年前，当我的侄子还很小的时候，一些奇怪的事情开始发生。他们的老师认为，班上很多孩子变得更加焦躁不安，无法集中注意力。他们不想安静地坐着或听课。

Around this time, an idea that didn't exist in Britain when I was a child – or, at least, was exceptionally rare – started to spread through the country.

大约在这个时候，一种在我小时候在英国不存在的想法——或者至少是极其罕见的——开始在全国传播。

It was argued by some researchers and doctors that these children had a biological disorder, and that is why they weren't paying attention. This idea proliferated with incredible speed across the English-

speaking world.

一些研究人员和医生认为，这些孩子患有生物学疾病，这就是为什么他们没有引起注意。这个想法以令人难以置信的速度在英语世界传播。

Between 2003 and 2011 alone, diagnoses of attention deficit hyperactivity disorder (ADHD) soared in the United States by 43 percent overall, and by 55 percent among girls. It has now reached the point that 13 percent of adolescents in the US have been given this diagnosis, and of them, a majority are given powerful stimulant drugs as a result.

仅在 2003 年至 2011 年间，美国的注意力缺陷多动障碍 (ADHD) 诊断率就飙升了 43%，其中女孩的诊断率飙升了 55%。现在美国有 13% 的青少年被诊断出患有这种疾病，其中大多数人因此服用了强效兴奋剂。

In Britain, the increase has also been extraordinary: for every child who was diagnosed with ADHD when I was seven years old, in 1986, there are now one hundred kids in this position. Between 1998 and 2004 alone, the number of children being given stimulants doubled.

在英国，这一数字的增长也是惊人的：1986 年，我七岁时，每有一个被诊断出患有多动症的孩子，现在就有一百个孩子处于这种情况。仅在 1998 年至 2004 年间，服用兴奋剂的儿童人数就增加了一倍。

When it comes to our own attention problems as adults, we often readily acknowledge a whole range of influences on us – the rise of invasive technologies, stress, lack of sleep, and so on. But when our children face the same challenges, over the past twenty years we have been drawn to a starkly simple story: that this problem is largely the result of a biological disorder. I wanted to investigate this in depth.

当谈到我们作为成年人的注意力问题时，我们常常很容易地承认对我们的一系列影响——侵入性技术的兴起、压力、睡眠不足等等。但当我们的孩子面临同样的挑战时，在过去的二十年里，我们被一个极其简单的故事所吸引：这个问题很大程度上是生物疾病的结果。我想深入调查这个问题。

Of all the chapters in this book, this is the one I've found hardest to write, because it's the topic about which serious scientists disagree the most.

在本书的所有章节中，这是我发现最难写的一章，因为这是严肃的科

学家们最不同意的话题。

By interviewing them, I learned that they don't agree on even the most basic questions – including whether ADHD actually exists in the way most people have been told it does, as a biological illness. So I want to go through this chapter slowly and carefully.

通过采访他们，我了解到他们甚至在最基本的问题上也不一致——包括多动症是否真的像大多数人被告知的那样存在，作为一种生物疾病。所以我想慢慢地、仔细地读完这一章。

This is the topic where I interviewed the most experts – over thirty of them – and I kept going back with more questions for a long time.

这是我采访了最多专家（超过三十位）的主题，并且很长一段时间我一直带着更多问题回去。

But I want to make clear a few things at the start that every expert I spoke with agreed on: everyone being diagnosed with ADHD has a real problem. They aren't making it up or faking it.

但我想首先澄清几件事，我采访过的每位专家都同意：每个被诊断为多动症的人都有一个真正的问题。他们没有编造或伪造。

Whatever the cause, if you or your child is struggling to focus, it's not your fault: you're not incompetent or undisciplined or any of the other stigmatising labels that might have been applied to you. You deserve compassion and practical help to find solutions.

无论原因是什么，如果您或您的孩子难以集中注意力，那不是您的错：您并不是无能或不守纪律，也不是任何其他可能贴在您身上的污名化标签。您应该得到同情和实际帮助来找到解决方案。

Most experts believed that for some children, there can be a biological contribution to their poor focus – though they disagreed on how large a contribution that was.

大多数专家认为，对于一些孩子来说，他们的注意力不集中可能是由生物学因素造成的——尽管他们对于这个因素的影响有多大存在分歧。

We should be able to have a calm and honest conversation about the

other aspects of the ADHD controversy while holding these truths in our minds.

我们应该能够就多动症争议的其他方面进行冷静和诚实的对话，同时牢记这些事实。



The question of whether kids who can't focus have a biological problem is, in fact, a fairly new debate, and it has changed a lot in the past few years. In 1952 the American Psychiatric Association first wrote a guide to all the things that can go wrong with a person's mental health, and the idea that kids who struggle to focus are suffering from a biological disorder was not included.

事实上，注意力不集中的孩子是否存在生物学问题是一个相当新的争论，并且在过去几年中发生了很大变化。1952年，美国精神病学协会首次编写了一份指南，介绍了所有可能影响一个人心理健康的问题，但没有包括难以集中注意力的孩子患有生物疾病的想法。

By 1968, the idea had gained enough popularity among psychiatrists that they added it, but they believed it applied to a tiny number of children.

到1968年，这个想法在精神病学家中获得了足够的普及，他们将其添加进来，但他们相信它只适用于极少数的儿童。

With each passing year, the number of kids identified as having this problem has soared, to the point that in many parts of the South in the United States, 30 percent of boys are now diagnosed with ADHD by the time they turn eighteen. As I write, it is swelling even further – huge numbers of adults are now being told they have this disability, with over 3 million of them already being prescribed stimulants.

随着时间的推移，被诊断患有多动症的孩子数量不断增加，以至于在美国南方的许多地区，现在有30%的男孩在18岁时被诊断出患有多动症。在我撰写本文时，这种情况正在进一步加剧——现在有大量成年人被告知他们患有这种残疾，其中超过300万人已经服用了兴奋剂。

The market for prescribing stimulants is now worth at least \$10 billion.

兴奋剂处方市场目前价值至少 100 亿美元。

As all this has exploded, a polarised argument has broken out over it.

随着这一切的爆发，一场两极分化的争论也随之爆发。

On one side, there are people saying ADHD is a disorder caused overwhelmingly by something going wrong within the individual's genes and brain, and that very large numbers of children and adults should be taking these stimulants to treat it.

一方面，有人说多动症是一种主要由个人基因和大脑出现问题引起的疾病，大量儿童和成人应该服用这些兴奋剂来治疗它。

This side has largely prevailed in the US.

这一派在美国基本上占了上风。

On the other side, there are people saying that attention problems are real and painful, but it is incorrect and harmful to see them as a biological disorder that requires the mass prescription of drugs, and we should be offering different forms of help.

另一方面，有人说注意力问题是真实而痛苦的，但将其视为一种需要大量处方药物的生物性疾病是不正确和有害的，我们应该提供不同形式的帮助。

This side has largely prevailed in places like Finland.

在芬兰等地，这一方基本上占了上风。



Let's start with the purely biological story, and why so many people find truth and relief in it. One day, on an Amtrak train, I got talking to a woman who asked me what I did for a job.

让我们从纯粹的生物学故事开始，以及为什么这么多人从中找到真相和解脱。有一天，在美国铁路公司的火车上，我和一位女士交谈，她问我做什么工作。

When I told her I was writing a book about why people struggle to pay attention, she started to tell me about her son. I didn't write it down at the time, so I only remember the broad details of what she said – but he had a typical experience.

当我告诉她我正在写一本关于人们为何难以集中注意力的书时，她开始向我讲述她儿子的事。我当时没有写下来，所以我只记得她说的话的大致细节——但他有一个典型的经历。

Years before, he had been really struggling at school – he wasn't able to pay attention in class, and he was in trouble a lot. She felt concerned for him, and judged by the other parents. Finally, the school's teachers urged her to take him to the doctor.

几年前，他在学校一直很挣扎——上课注意力不集中，而且遇到了很多麻烦。她感到关心他，并受到其他父母的评判。最后，学校老师催促她带他去看医生。

Their doctor spoke to her son and then told her that he had diagnosed him with ADHD. He told her that it meant her son had different genetics from other kids, and that as a result, he had developed a different kind of brain, one that wasn't like most people's. This meant he found it much harder to sit still and focus. Stephen Hinshaw, a professor of psychology at Stanford University, similarly told me that genetics account for '75 to 80 percent' of ADHD, a ballpark figure that is based on a large series of scientific studies.

他们的医生与她的儿子交谈，然后告诉她，他诊断出他患有多动症。他告诉她，这意味着她的儿子拥有与其他孩子不同的基因，因此，他发育出了一种不同的大脑，一种与大多数人不同的大脑。这意味着他发现静坐并集中注意力变得更加困难。斯坦福大学心理学教授史蒂芬·欣肖（Stephen Hinshaw）同样告诉我，ADHD 的“75% 到 80%”与遗传有关，这是一个基于大量科学研究的大概数字。

It's distressing to be told your child has a disability. She felt shocked – but at the same time as they are offered this message, parents are also told lots of positive things: your son's behaviour isn't your fault.

被告知您的孩子有残疾是令人痛苦的。她感到震惊——但在向父母提供这一信息的同时，他们也被告知了很多积极的事情：你儿子的行为不是你的错。

In fact, you deserve sympathy: you've been coping with something really hard. And best of all, there is a solution. Her son was prescribed the stimulant drug Ritalin. When he started to take it, he stopped being so restless and bouncing off the walls. He said he didn't like how it made him feel, though – one child I know told me that he felt like his brain was turned off when he took the drug – so his mother felt genuinely conflicted.

事实上，你值得同情：你一直在应对一些非常困难的事情。最重要的是，有一个解决方案。她的儿子服用了兴奋剂利他林。当他开始接受它时，他不再那么焦躁不安和从墙上弹跳。不过，他说他不喜欢这给他带来的感觉——我认识的一个孩子告诉我，当他服药时，他感觉自己的大脑被关闭了——所以他的母亲感到非常矛盾。

Ultimately, she decided to continue to give him the stimulants until he turned eighteen, because she felt that at least this would stop him being thrown out of school. There's no dramatic aspect to this story: he didn't have a heart attack or start using meth.

最终，她决定继续给他服用兴奋剂，直到他十八岁，因为她觉得这至少可以防止他被学校开除。这个故事没有戏剧性的一面：他没有心脏病发作，也没有开始吸食冰毒。

On balance, she thought she was doing the right thing.

总的来说，她认为自己做的是正确的事。

I feel a lot of sympathy for her. But there are several reasons why I also feel worried about the fact that there are more and more people like her, who now believe this is an overwhelmingly genetic problem that needs to be dealt with primarily with stimulants.

我对她深感情同。但有几个原因让我也感到担心，越来越多的人像她一样，现在认为这是一个压倒性的遗传问题，需要主要通过兴奋剂来解决。

I think the best way to start to explain why might be to step sideways for a moment, and to look at what happened when the concept of ADHD spread beyond kids, and even beyond adults, to a whole new category of living creatures.

我认为开始解释原因的最好方法可能是暂时退一步，看看当多动症的概念从儿童甚至成年人传播到一个全新的生物类别时会发生什么。



One day in the 1990s, a nine-year-old beagle named Emma was led into a vet's surgery. Her stressed-out owner explained that she had a problem.

20 世纪 90 年代的一天，一只名叫艾玛 (Emma) 的 9 岁比格犬被带进兽医手术室。她的主人压力很大，解释说她遇到了问题。

The dog was anxious all the time – she ate constantly, and there were times when she would suddenly go ballistic, ricocheting off the walls and barking incessantly. If she was left alone in the house, the dog would freak out even more.

这只狗一直很焦虑——她不停地吃东西，有时她会突然变得暴躁，从墙上弹起来，不停地吠叫。如果把她一个人留在家里，狗会更加害怕。

The owner kept using one word to describe Emma: hyperactive. She implored the vet to help her figure out what to do.

店主一直用一个词来形容艾玛：多动。她恳求兽医帮助她弄清楚该怎么做。

The vet she had come to see was a man named Nicholas Dodman, an English immigrant who – over a thirty-year career – had become one of the leading veterinary specialists in the United States, and a professor at Tufts University. At first, Nicholas prescribed for Emma and her owner to go to dog training, where both of them could learn new skills to help them interact. It worked – but not completely.

她来看望的兽医名叫尼古拉斯·多德曼 (Nicholas Dodman)，他是一位英国移民，在三十多年的职业生涯中，已成为美国顶尖的兽医专家之一，也是塔夫茨大学的教授。起初，尼古拉斯建议艾玛和她的主人去参加狗训练，在那里他们俩都可以学习新的技能来帮助他们互动。它确实有效——但并不完全有效。

The owner said Emma's problems dipped by around 30 percent. When he heard this, Nicholas decided that Emma in fact had ADHD – a concept that, until he made his own breakthroughs in interpreting

animal behaviour, had only really been applied to humans. He prescribed the stimulant drug Ritalin for the dog, and told Emma's owner to smush it into her food twice daily.

店主说艾玛的问题减少了 30% 左右。当尼古拉斯听到这个消息时，他断定艾玛实际上患有多动症——这个概念在他在解释动物行为方面取得突破之前，只真正应用于人类。他给狗开了兴奋剂利他林，并告诉艾玛的主人每天两次将其涂抹在她的食物中。

When she came back not long afterwards, the owner was thrilled. The problem, she said, was solved. The dog had stopped bouncing around the house and trying to eat all the time.

没过多久她回来了，店主很兴奋。她说，问题已经解决了。狗不再在房子里跳来跳去，也不再总想吃东西了。

It was true that Emma still howled terribly when she was left alone, but otherwise, she was the dog her owner had always hoped for.

确实，当艾玛独自一人时，她仍然会嚎叫得很厉害，但除此之外，她就是主人一直希望的狗。

By the time I met Nicholas at his home in Massachusetts, this had become a normal day at his clinic. He regularly prescribes Ritalin and other stimulants to animals he diagnoses as having ADHD.

当我在尼古拉斯位于马萨诸塞州的家中见到他时，这已经成为他诊所的正常一天。他经常给他诊断患有多动症的动物开利他林和其他兴奋剂。

Nicholas is a pioneer, and he's been called the 'Pied Piper' of drugging animals for psychiatric problems.

尼古拉斯是一位先驱，他被称为给动物用药治疗精神问题的“花衣魔笛手”。

I was curious about how he came to take this position. He told me it all began quite by accident, like many scientific breakthroughs. In the mid-1980s he was called as a vet to visit a horse named Poker, who had a problem.

我很好奇他是如何担任这个职位的。他告诉我，这一切都是偶然开始的，就像许多科学突破一样。20 世纪 80 年代中期，他作为兽医被叫去

看望一匹名叫 Poker 的马，这匹马出现了问题。

Poker was obsessively ‘cribbing’ – a terrible compulsive behaviour that around 8 percent of horses develop when they are shut away in stalls for most of the day.

扑克是一种令人着迷的“抄袭”行为——大约 8% 的马在一天的大部分时间都被关在马厩里时，就会出现这种可怕的强迫行为。

It's an awkward repetitive action, where the horse will grasp with his teeth onto something solid – like the fence in front of him – then arch his neck, swallow, and grunt hard. He'll do this again and again, compulsively.

这是一个笨拙的重复动作，马会用牙齿抓住一些坚固的东西——比如他面前的栅栏——然后弓起脖子，吞咽，并用力发出咕噜声。他会一次又一次地、不由自主地这样做。

The so-called treatments for cribbing at that time were shockingly cruel. Sometimes vets would drill holes into the horse's face so he couldn't suck in air, or they would put brass rings in the horse's lips so he couldn't grasp the fence.

当时所谓的抄袭待遇，残酷得令人震惊。有时兽医会在马的脸上钻洞，这样它就无法吸入空气，或者他们会在马的嘴唇上放上铜环，这样它就无法抓住栅栏。

Nicholas was appalled by these practices, and in his search for alternatives, he suddenly had an idea. What if we gave this horse a drug? He decided to inject the horse with naloxone, which is an opioid-blocker. ‘Within a few minutes, the horse just completely stopped,’ he told me. ‘The owner was like, “Oh my God.

尼古拉斯对这些做法感到震惊，在寻找替代方案时，他突然有了一个主意。如果我们给这匹马注射药物会怎么样？他决定给马注射纳洛酮，这是一种阿片类药物阻滞剂。“几分钟之内，马就完全停了下来，”他告诉我。店主当时的反应是：“天哪。

Oh my God.”’ After about twenty minutes the horse started cribbing again, but ‘we repeated that [injection] many times with many

different horses subsequently, and had exactly the same result’.

我的天啊。” ” 大约二十分钟后，这匹马又开始啃咬，但“我们随后对许多不同的马重复了多次[注射]，并得到了完全相同的结果”。

He said: ‘It fascinated me that you could change behaviour so dramatically by changing brain chemistry ... You know, that changed my career.’

他说：“让我着迷的是，你可以通过改变大脑化学物质来如此巨大地改变行为……你知道，这改变了我的职业生涯。”

From that point on, Nicholas began to believe you could solve the problems of many animals by responding to them in ways that, until then, had only been applied to humans. For example, he was consulted by Calgary Zoo about a polar bear that was endlessly pacing, and he recommended giving it a massive dose of Prozac. It stopped pacing and began to sit docilely in its cage. Today, thanks in part to Nicholas’s shift in perspective, there are parrots on Xanax and Valium, there are many species from chickens to walruses being given anti-psychotics, and there are cats on Prozac. One of the staff at a leading US zoo told a reporter that psychiatric drugs are ‘definitely a wonderful management tool, and that’s how we look at them.

从那时起，尼古拉斯开始相信，你可以通过以前只应用于人类的方式来应对许多动物的问题，从而解决这些问题。例如，卡尔加里动物园向他咨询了一只北极熊无休止地踱步的情况，他建议给它服用大剂量的百忧解。它停止了踱步，开始温顺地坐在笼子里。今天，部分归功于尼古拉斯观点的转变，有鸚鵡在服用 Xanax 和安定，有许多物种从鸡到海象都在服用抗精神病药物，还有猫在服用百忧解。美国一家主要动物园的一名工作人员告诉记者，精神药物“绝对是一种极好的管理工具，我们就是这样看待它们的”。

To be able to just take the edge off puts us a little more at ease.’ Nearly half of all zoos in the US now admit giving psychiatric drugs to their animals, and 50 to 60 percent of the owners who come to Nicholas’s clinic are seeking psychiatric meds for their pets.

现在，美国近一半的动物园都承认给动物服用精神药物，而来到尼古拉斯诊所的动物园主中有 50% 到 60% 都在寻求精神药物治疗。为他们的宠物服用精神科药物。

At times, it sounds like *One Flew Over the Cuckoo's Nest* for actual cuckoos.

有时，这听起来就像是真正的杜鹃飞越杜鹃巢。

Before I went to meet Nicholas, I expected him to justify this in one particular way.

在我去见尼古拉斯之前，我希望他能以一种特定的方式证明这一点。

I thought he would tell me the story that lots of doctors tell parents who have kids with attention problems – that this is a disorder with biological causes, and this is why they need biological solutions in the form of drugs. But he didn't say that.

我以为他会告诉我一个故事，许多医生告诉那些孩子有注意力问题的父母——这是一种由生物学原因引起的疾病，这就是为什么他们需要药物形式的生物解决方案。但他没有这么说。

In fact, his explanation started where his own journey into this science had begun – with cribbing horses. ‘No one's ever seen a horse in the wild do this. This is a condition of “domestication”, keeping horses in unnatural situations,’ he told me.

事实上，他的解释是从他自己的科学之旅开始的地方开始的——抄马。“没有人见过野外的马这样做过。这是“驯化”的一种情况，将马置于不自然的环境中，”他告诉我。

‘If they'd never been put in a stall, and they'd never been subjected to that psychological pressure early on, they wouldn't develop it.’

“如果他们从来没有被关进过畜栏，也没有在早期受到过这种心理压力，他们就不会患上这种病。”

As he described what happened to these horses, he used a phrase that struck me. He said these horses are suffering from ‘frustrated biological objectives’. Horses want to roam and run and graze. When they can't express their innate nature, their behaviour and focus go awry, and they start to act out.

当他描述这些马的遭遇时，他使用了令我印象深刻的一句话。他说这

些马正遭受“生物学目标受挫”的困扰。马想要漫步、奔跑、吃草。当他们无法表达自己的本性时，他们的行为和注意力就会出现偏差，并开始表现出来。

He told me that ‘the pressure of having your biological objectives thwarted is such that it opens a Pandora’s box’, where you’ll try to find any behaviour that will ‘alleviate this crushing psychological pressure or inability to do anything ... Horses spend about 60 percent of their time in the wild grazing, so it’s not surprising that one of the things that gives them release is a sort of fake grazing, which is what cribbing is.’

他告诉我，“你的生物目标受阻所带来的压力就像打开了潘多拉魔盒”，你会尝试找到任何行为来“减轻这种沉重的心理压力或无能为力……马花费大约 60 他们有百分之百的时间在野外放牧，所以让他们放松的其中一个事情就是假放牧，这就是抄袭，这并不奇怪。

He admitted freely that his approach of drugging animals for what’s dubbed ‘zoochosis’ – the madness animals often develop when they are caged – is an extremely limited solution. I asked him if, for example, drugging the polar bear had solved his problem. ‘No,’ he replied. ‘It’s a Band-aid.’

他坦率地承认，他给动物注射药物以治疗所谓的“动物病”（动物被关在笼子里时经常会发疯）的方法是一种极其有限的解决方案。例如，我问他给北极熊下药是否解决了他的问题。“不，”他回答道。‘这是一个创可贴。

The problem is you’ve taken a polar bear out of the polar environment, and you’ve stuck it in a zoo ... Polar bears in nature will walk for miles across the Arctic tundra. They look for seal places, and they swim, and they eat seals.

问题是你把一只北极熊带出了极地环境，然后把它关在动物园里……自然界中的北极熊会在北极苔原上行走数英里。他们寻找海豹的栖息地，游泳，吃海豹。

The exhibit [the cage where this polar bear was trapped] is nothing like real life. So, just like the guy in jail, they pace to appease the inner pain of being denied a real life ... They’ve got all these instincts that are all intact, that they’re unable to utilise.’

展览[困住这只北极熊的笼子]与现实生活完全不同。所以，就像监狱里的人一样，他们的步伐是为了平息被剥夺现实生活的内心痛苦……他们拥有所有这些完整的本能，但他们无法利用。

The long-term solution is to shut down zoos, he said, and to let all animals live in an environment that is compatible with their natures. He told me about a dog that was unable to focus on anything and spent all its time obsessively chasing its own tail.

他说，长期的解决办法是关闭动物园，让所有动物生活在与其天性相适应的环境中。他告诉我有一只狗无法集中注意力，所有的时间都在痴迷地追着自己的尾巴。

It lived in a tiny apartment in Manhattan. Then, one day, its owners split up, and it was sent to live on a farm upstate – and its tail-chasing and apparent focus problems went away. All dogs should run for at least an hour off-leash every day, but ‘not many’ pet dogs in the US get that, he told me. They’re frustrated, and it causes problems.

它住在曼哈顿的一间小公寓里。然后，有一天，它的主人分手了，它被送到北部的一个农场生活——它的追尾和明显的注意力集中问题消失了。他告诉我，所有的狗都应该每天在不拴绳的情况下跑步至少一个小时，但在美国，“没有多少”宠物狗能做到这一点。他们感到沮丧，这会导致问题。

He can’t magic that world into existence by himself. In the absence of those long-term solutions, he wanted to know, what would I have him do? We discussed this for a long time. I tried to explain to him that while I saw where he was coming from, I felt instinctively uncomfortable with it.

他无法凭一己之力用魔法创造那个世界。如果没有这些长期解决方案，他想知道，我会让他做什么？我们讨论了很长时间。我试图向他解释，虽然我看到了他的想法，但我本能地感到不舒服。

These animals are showing these behaviours as a way of expressing distress – Poker the horse hated being shut away, and Emma the beagle hated being left alone, because horses need to run and dogs need a pack.

这些动物表现出这些行为是表达痛苦的一种方式——马匹克讨厌被关起来，小猎犬艾玛讨厌被单独留下，因为马需要奔跑，而狗需要一群

人。

I was worried that by muffling their signals with drugs, he might be encouraging their owners into a kind of fantasy – that they could take a creature, ignore its nature, and make it live a life that fits the owner's needs, not the animal's, without any cost.

我担心通过用药物抑制它们的信号，他可能会鼓励它们的主人进入一种幻想——他们可以带走一个生物，忽略它的本性，让它过上适合主人需要的生活，而不是动物的需要，无需任何成本。

We need to hear the animal's distress, not suppress it.

我们需要倾听动物的痛苦，而不是压制它。

He listened thoughtfully, and responded by describing to me pigs who live and die in brutal factory farms, ripped from their mothers as babies, spending their whole lives in carts where they can't turn around.

他若有所思地听着，然后向我描述了那些在残酷的工厂化农场里生活和死亡的猪，它们在婴儿时期就被从母亲身边夺走，一生都在无法转身的推车里度过。

He asked: 'I could make this pig a lot better and tolerate this intolerable situation with less psychological pain if I was to put Prozac in the drinking line. Would you be against that?' But the choices he was confronting me with, I said, with shouldn't exist.

他问道：“如果我把百忧解放入饮水管中，我就能让这头猪好很多，能够忍受这种无法忍受的情况，同时减少心理上的痛苦。”你会反对吗？”但我说，他面对我的选择不应该存在。

His hypothetical concedes too much – it takes a dysfunctional environment for granted, and assumes that all we can do is try to adapt to it and take the edge off. We need better choices than that. 'I mean – reality shouldn't be the choice,' he replied.

他的假设承认了太多——它将功能失调的环境视为理所当然，并假设我们所能做的就是努力适应它并摆脱困境。我们需要比这更好的选择。“我的意思是——现实不应该成为选择，”他回答道。

‘It’s what we have, you know? So you have to work with what you’ve got.’

‘这就是我们所拥有的，你知道吗？所以你必须利用你所拥有的一切。



I began to ask myself – is there any way in which children who struggle to focus are like Emma the beagle, and are being medicated for what is in fact an environmental problem? I learned that scientists fiercely disagree about this.

我开始问自己——有什么办法可以让那些难以集中注意力的孩子们像小猎犬艾玛一样，接受药物治疗来治疗实际上是环境问题的药物吗？我了解到科学家们对此存在严重分歧。

We do know that the huge rise in children being diagnosed with attention problems has coincided with several other big changes in the way children live.

我们确实知道，被诊断患有注意力问题的儿童数量大幅增加，同时儿童生活方式也发生了其他一些重大变化。

Kids are now allowed to run around far less – instead of playing in the streets and in their neighbourhoods, they now spend almost all their time inside their homes or school classrooms. Children are now fed a very different diet – one that lacks many nutrients needed for brain development, and is full of sugars and dyes that negatively affect attention.

现在，孩子们被允许到处乱跑的次数大大减少了——他们不再在街上和社区里玩耍，而是几乎把所有时间都花在家里或学校教室里。现在，孩子们的饮食习惯截然不同——缺乏大脑发育所需的许多营养，而且富含糖分和染料，会对注意力产生负面影响。

Children’s schooling has changed, so it now focuses almost entirely on preparing them for high-stress testing, with very little space for nurturing their curiosity. Is it a coincidence that ADHD diagnoses are rising at the same time as these big changes, or is there a connection?

孩子们的学校教育已经发生了变化，所以现在几乎完全专注于让他们为

高压测试做好准备，几乎没有空间来培养他们的好奇心。ADHD 诊断与这些重大变化同时上升是巧合还是有联系？

I've already discussed the evidence that our dramatic changes in diet and rise in pollution are causing a rise in children's attention problems, and I'll come to the evidence about how the other changes might be affecting children's attention in the next chapter.

我已经讨论了饮食的巨大变化和污染的增加导致儿童注意力问题增加的证据，我将在下一章中讨论其他变化可能如何影响儿童注意力的证据。

I want to start, though, with somebody who has pioneered a different way of responding to ADHD in children. Across three years, I repeatedly interviewed Dr Sami Timimi, who is a leading child psychiatrist in Britain, and one of the most prominent and vocal critics in the world of the way we talk about ADHD today.

不过，我想从一位率先采用不同方法应对儿童多动症的人开始。三年来，我多次采访了萨米·蒂米米（Sami Timimi）博士，她是英国著名的儿童精神病学家，也是当今世界上对我们谈论多动症的方式最著名和最直言不讳的批评者之一。

I went to see him in Lincoln, a town that was built over a thousand years ago around a cathedral and seems to have been sighing back into the earth ever since.

我去林肯看他，这座小镇是一千多年前围绕一座大教堂而建的，从那时起它似乎就在叹息着回到大地。

The old parts of the town have been taken over by chain stores paying minimum wage, and when Sami moved there he discovered his practice was full of people who were really struggling, through no fault of their own, with low wages and little hope.

镇上的老城区已经被支付最低工资的连锁店占领了，当萨米搬到那里时，他发现他的诊所里到处都是人，他们的工资很低，希望渺茫，但并不是他们自己的错，他们确实在挣扎。

He could see that people in Lincoln needed a lot of practical help – but he was surprised to find that people seemed to expect one thing from him. They thought, as he put it, ‘That a psychiatrist was basically

somebody who does medication,’ and he was treated as a pill-dispenser.

他可以看到林肯的人们需要很多实际的帮助——但他惊讶地发现人们似乎对他抱有期望。正如他所说，他们认为“精神科医生基本上就是从事药物治疗的人”，而他被视为一名配药员。

He inherited from his predecessor twenty-seven kids who were being prescribed stimulant drugs for ADHD, and local schools were pressing for more kids to be put on them. It would have been easy for Sami to just carry on with this approach.

他从前任那里继承了 27 个孩子，这些孩子正在服用治疗多动症的兴奋剂药物，当地学校正在敦促更多的孩子接受这些药物。对于萨米来说，继续这种方法是很容易的。

But he was pensive. He believed that if he was going to take his responsibility as a doctor to these kids seriously, he had to take time to look in depth at their lives and their environments.

但他却陷入了沉思。他相信，如果他要认真对待这些孩子作为一名医生的责任，他就必须花时间深入了解他们的生活和环境。

One of the children who had been diagnosed with ADHD and given stimulants by Sami’s predecessor was an eleven-year-old boy, who he called Michael to protect his confidentiality. After he was dragged into Sami’s office by his mother, Michael refused to even talk to him.

萨米的前任被诊断出患有注意力缺陷多动症，并给他注射了兴奋剂，其中一名十一岁的男孩是萨米的前任，萨米称他为迈克尔，以保护他的隐私。迈克尔被母亲拖进萨米的办公室后，甚至拒绝和他说话。

He just sat there, angrily sulking, as his mother explained that she didn’t know what to do. She said that Michael kept kicking off at school, refusing to focus and becoming aggressive. As she explained all this, Michael kept interrupting her, sullenly demanding to leave.

当他母亲解释说她不知道该怎么办时，他只是坐在那里，生气地生闷气。她说迈克尔在学校总是开开心心的，注意力不集中，而且变得咄咄逼人。当她解释这一切时，迈克尔不断打断她，阴沉地要求离开。

Sami refused to decide anything based on just one session. He felt

he needed to learn more – so he kept interviewing this mother and son over a period of several months. He wanted to understand when these problems began.

萨米拒绝仅根据一次会议就做出任何决定。他觉得自己需要了解更多，所以他在几个月的时间里不断采访这对母子。他想了解这些问题何时开始。

As he probed into this, it slowly emerged that two years before, Michael's dad had moved to another town, and he hardly ever talked to his son any more. It was in the aftermath of this that Michael started acting up at school. Sami wondered if he felt rejected.

当他探究此事时，慢慢发现两年前，迈克尔的父亲搬到了另一个城镇，他几乎不再和儿子说话了。正是在这之后，迈克尔开始在学校里胡闹。萨米想知道他是否感到被拒绝。

Sami told me: 'When you're a child, you're not developed intellectually to take a step back and look at things from a more rational, objective point of view ... When a father says they're going to come and see you, but they never turn up, you imagine it's because there's something wrong with you.'

萨米告诉我：“当你还是个孩子的时候，你的智力还没有发育成熟，无法退后一步，从更理性、客观的角度看待事物……当父亲说他们要来看你时，但他们从来没有出现，你想象这是因为你出了什么问题。

It's because they don't want to see you. It's because you're not very nice. It's because you cause problems.'

这是因为他们不想见到你。那是因为你不太好相处。这是因为你造成了问题。

So one day, Sami decided to phone Michael's dad. He agreed that he would come into the doctor's office to see Sami, and they talked over the situation. The father was chastened, and decided to come back into his son's life in a structured and consistent way.

所以有一天，萨米决定给迈克尔的父亲打电话。他同意去医生办公室看萨米，他们讨论了情况。父亲受到了惩罚，决定以一种有条理、一致的方式回到儿子的生活中。

Sami called Michael in and told him that there was nothing wrong with him. It wasn't his fault his dad had disengaged. He didn't have a disorder. He had been let down, and that wasn't his fault. Now it was going to change.

萨米把迈克尔叫了进来，告诉他自己没有任何问题。他父亲的脱离并不是他的错。他没有疾病。他感到失望，但这不是他的错。现在情况要改变了。

As Michael reconnected with his dad, over several months they weaned him off his stimulant drugs. Sami did this gradually because the withdrawal effects can be severe and terrible. As time passed, several things changed for Michael. He had a male role model.

当迈克尔与他的父亲重新取得联系时，他们在几个月内让他戒掉了兴奋剂药物。萨米逐渐这样做，因为戒断反应可能是严重和可怕的。随着时间的流逝，迈克尔发生了一些变化。他有一个男性榜样。

He knew he wasn't a bad person who drove his dad away. He stopped acting out at school and started learning again. Sami felt he had identified the underlying problem and solved it – and so the attention problems gradually went away.

他知道自己不是一个赶走他父亲的坏人。他不再在学校表现不佳，重新开始学习。萨米觉得他已经找到了根本问题并解决了它——因此注意力问题逐渐消失了。

Another of the kids brought to Sami was a nine-year-old boy he called Aden, who behaved well at home, but seemed to be behaving badly at school. His teacher said he was hyperactive and kept distracting the other kids, and was urging that he be given stimulants. Sami decided to visit the school, and he was appalled by what he saw. Aden's teacher spent all her time yelling at the class to be quiet, and irrationally punishing Aden and a few other kids she seemed to have taken a dislike to.

另一个被带到萨米身边的孩子是一个九岁的男孩，他叫亚丁，他在家表现得很好，但在学校似乎表现得很糟糕。他的老师说他过度活跃，一直分散其他孩子的注意力，并敦促他服用兴奋剂。萨米决定参观学校，他对所看到的感到震惊。亚丁的老师一直在对全班大喊大叫，让他们安静，并无理地惩罚亚丁和其他几个她似乎不喜欢的孩子。

The classroom was in chaos, and Aden was being blamed. At first, Sami tried to help the teacher to change her story about Aden, but she wouldn't listen, so he helped Aden's parents move him to a new, less chaotic school.

教室里一片混乱，亚丁受到了指责。起初，萨米试图帮助老师改变她对亚丁的看法，但她不听，所以他帮助亚丁的父母把他转移到一所新的、不那么混乱的学校。

Once he got settled in, he started to thrive, and his attention problems also faded.

一旦安顿下来，他就开始茁壮成长，他的注意力问题也消失了。

Sami does still occasionally continue the prescription of stimulants to children, but it's rare, it's short term, and it's after trying all other options.

萨米偶尔仍然会继续给孩子开兴奋剂，但这种情况很少见，而且是短期的，而且是在尝试了所有其他选择之后。

He said that with the vast majority of cases of kids with attention problems that come into his office, if he listens carefully and offers practical support to change the child's environment, it almost always reduces or ends the problem they have.

他说，绝大多数有注意力问题的孩子来到他的办公室，如果他仔细倾听并提供实际支持来改变孩子的环境，几乎总能减少或结束他们所遇到的问题。

He told me that when people hear a child has been diagnosed with ADHD, they often imagine this is like a diagnosis of, say, pneumonia – that a doctor has identified an underlying pathogen or illness, and is now going to prescribe something that can deal with that physical problem.

他告诉我，当人们听说一个孩子被诊断出患有多动症时，他们常常会想象这就像诊断出肺炎一样——医生已经识别出潜在的病原体或疾病，现在要开出一些可以治疗的药物。与那个身体问题。

But with ADHD, there are no physical tests a doctor can carry out. All

she can do is talk to the child, and people who know the child, and see if the kid's behaviour matches a checklist drawn up by psychiatrists. That's it. He says: 'ADHD is not a diagnosis. It's not a diagnosis.

但对于多动症，医生无法进行身体检查。她所能做的就是与孩子以及认识孩子的人交谈，看看孩子的行为是否符合精神科医生制定的清单。就是这样。他说：“多动症不是一种诊断。这不是诊断。

It's just a description of certain behaviours that sometimes occur together. That's all it is.' All you are saying, when a child has been diagnosed with ADHD, is that a child is struggling to focus.

它只是对有时同时发生的某些行为的描述。就是这样。'当一个孩子被诊断出患有多动症时，你所说的只是一个孩子很难集中注意力。

'It doesn't tell you anything about the "why" question.' It's like being told that a child has a cough, listening to the cough, and then saying – yes, the child has a cough.

“它没有告诉你任何关于‘为什么’的问题。”这就像被告知一个孩子咳嗽，听着咳嗽声，然后说——是的，孩子咳嗽了。

If a doctor identifies a child with attention problems, that should be the first step in the process – not the last.

如果医生发现孩子有注意力问题，那应该是该过程的第一步，而不是最后一步。

I was moved by Sami's experiences – but I also asked: how do we know if this kind of approach – listening to the child, and trying to solve the underlying problem – actually works, beyond these moving anecdotes? I dug deeply into this question.

我被萨米的经历所感动，但我也问：除了这些感人的轶事之外，我们如何知道这种倾听孩子的声音并试图解决根本问题的方法是否真的有效？我深入探究了这个问题。

It turns out there's a huge number of studies investigating what happens when you give children stimulant drugs (I'll come to the results of them soon). There are some studies into what happens when

you give parenting classes on how to set boundaries, give consistent feedback, and so on (the evidence is mixed, but you often see a mild improvement).

事实证明，有大量研究调查了给孩子服用兴奋剂时会发生什么（我很快就会得出结果）。有一些研究是关于当你上教养课程时如何设定界限、提供一致的反馈等等时会发生什么（证据好坏参半，但你经常会看到轻微的改善）。

But I wanted to know – is there any research into what happens when you intervene in the way Sami does?

但我想知道——是否有任何研究表明当你像萨米那样干预时会发生什么？

It turned out that – so far as I could uncover – in the whole world, there seemed to be only one group of scientists who had studied something close to this question, in a remarkable long-term study, so I went to Minneapolis, where they conducted their research, to meet them.

事实证明，据我所知，全世界似乎只有一组科学家在一项非凡的长期研究中研究过与这个问题相近的东西，所以我去了一明尼阿波利斯，那里他们进行了研究，以满足他们。

In 1973, Alan Sroufe, who became a professor of child psychology there, started a massive collective research project, which was designed to answer a really big question – what factors in your life really shape you? We met in the café of a garden centre in the city's suburbs.

1973 年，成为该校儿童心理学教授的艾伦·斯鲁夫 (Alan Sroufe) 启动了一个大规模的集体研究项目，旨在回答一个非常大的问题——生活中的哪些因素真正塑造了你？我们在市郊一个花园中心的咖啡馆里见面。

Alan is a gentle, softly spoken scientist who, at the end of our conversation, went to pick up his grandchildren from school. For more than forty years, Alan and his team have been studying the same 200 people, who were all born into poor families.

艾伦是一位温柔、说话轻声细语的科学家，在我们谈话结束后，他去学校接他的孙子们。四十多年来，艾伦和他的团队一直在研究同样的

200 个人，他们都出生在贫困家庭。

They have been tracked and analysed from birth all the way into middle age. These scientists measured a huge range of factors in these people's lives – from their bodies to their home lives, from their personalities to their parents.

他们从出生一直到中年都受到跟踪和分析。这些科学家测量了这些人生活中的大量因素——从他们的身体到他们的家庭生活，从他们的性格到他们的父母。

One of the many things they wanted to figure out is: what factors in a person's life can lead to them developing attention problems?

他们想弄清楚的众多事情之一是：一个人生活中的哪些因素会导致他们出现注意力问题？

At the start, Alan was fairly confident about the answer they would find. He believed – like most scientists at the time – that ADHD was caused entirely by some inborn biological problem in the child's brain, so he was sure one of the most important measures they took would be of the child's neurological status at birth.

一开始，艾伦对他们会找到的答案相当有信心。和当时的大多数科学家一样，他相信多动症完全是由孩子大脑中的一些先天生物学问题引起的，因此他确信他们采取的最重要的措施之一就是孩子出生时的神经系统状态。

They also measured the baby's temperament in its first few months, and then, over time, they measured all sorts of other things – like how stressful their parents' lives were, and how much social support the family got. His eye was keenly fixed on those neurological measures.

他们还测量了婴儿在最初几个月的气质，然后，随着时间的推移，他们测量了各种其他事情——比如父母的生活压力有多大，以及家庭获得了多少社会支持。他的目光敏锐地注视着那些神经学指标。

By the time the kids were three and a half, the scientists started to make predictions about which of them would develop ADHD. They wanted to see: which factors made it more likely? Alan was startled by what they found, as the kids got older and some were indeed diagnosed with attention problems. It turned out their neurological

status at birth didn't help at all in predicting which kids would develop serious attention problems. So what did?

当孩子们三岁半时，科学家们开始预测他们中的哪些人会患上多动症。他们想看看：哪些因素使得这种情况更有可能发生？艾伦对他们的发现感到震惊，随着孩子们长大，有些人确实被诊断出注意力有问题。事实证明，他们出生时的神经系统状态根本无法帮助预测哪些孩子会出现严重的注意力问题。那么做了什么呢？

They discovered 'the surrounding context is the most important thing', Alan told me, and a crucial factor was 'the amount of chaos in the environment'. If a child is raised in an environment where there is a lot of stress, they are significantly more likely to then develop attention problems and be diagnosed with ADHD. It turns out that the elevated levels of stress in their parents' lives usually came first. He told me: 'You could see it unfolding.'

艾伦告诉我，他们发现“周围的环境是最重要的”，而一个关键因素是“环境中的混乱程度”。如果孩子压力很大的环境中长大，他们就更有可能会出现注意力问题并被诊断为多动症。事实证明，父母生活中的压力通常是首先出现的。他告诉我：“你可以看到它正在展开。”

But why would a child growing up in a stressful environment be more likely to have this problem? I of course thought back to everything I had learned from Nadine Burke Harris. Alan began to offer an additional layer of explanation – one that is compatible with her findings. He explained that when you're very young, if you get upset or angry, you need an adult to soothe you, and calm you down.

但为什么在压力环境下长大的孩子更容易出现这个问题呢？当然，我回想起了从纳丁·伯克·哈里斯那里学到的一切。艾伦开始提供另一层解释——与她的发现相一致的。他解释说，当你很小的时候，如果你感到不安或生气，你需要一个成年人来安慰你，让你平静下来。

Over time, as you grow up, if you are soothed enough, you learn to soothe yourself. You internalise the reassurance and relaxation your family gave to you.

随着时间的推移，随着你的成长，如果你得到足够的安慰，你就会学会安慰自己。您将家人给予您的安心和放松内化。

But stressed-out parents, through no fault of their own, find it harder to soothe their children – because they are so amped-up themselves. That means that their children don't learn how to calm and centre themselves in the same way.

但压力过大的父母却发现很难安抚孩子，这并不是他们自己的错，因为他们自己太兴奋了。这意味着他们的孩子无法以同样的方式学会如何冷静和集中注意力。

Their kids are, as a result, more likely to respond to difficult situations by getting angry or distressed – feelings that wreck their focus.

因此，他们的孩子更有可能通过生气或痛苦来应对困难情况——这些感觉会分散他们的注意力。

To give an extreme example, he said to me – you try being evicted from your apartment, and then giving your child all the soothing she needs that night. He added – it's not just poverty that causes this – middle-class parents struggle with stress too.

举一个极端的例子，他对我说——你试着被赶出你的公寓，然后给你的孩子当晚她需要的所有安慰。他补充说，造成这种情况的不仅仅是贫困，中产阶级的父母也面临着压力。

He told me: 'Many parents are currently overwhelmed with their life circumstances, such that they cannot provide a stable and calm and supportive environment for their children.' The worst response to this discovery is to 'point fingers at the parents'.

他告诉我：“许多父母目前对自己的生活环境感到不知所措，无法为孩子提供一个稳定、平静和支持性的环境。”对这一发现最糟糕的反应是“指责父母”。

That only causes more stress, and more problems for the kids, and misses the truth: 'Those parents were doing the best they could. I guarantee you they loved their children.' Parenting takes place in an environment – and if that environment floods parents with stress, it will inevitably affect their children.

这只会给孩子们带来更多的压力和更多的问题，并且忽略了一个事实：“那些父母已经尽力了。”我向你保证，他们爱自己的孩子。”养育孩

子是在一个环境中进行的——如果这个环境给父母带来了压力，那将不可避免地影响到他们的孩子。

After gathering evidence on this for decades, Alan concluded that ‘none of what I originally believed turned out to be true’, and a ‘clear majority’ of the kids who were later diagnosed ‘were not born to be ADHD. They developed these problems in reaction to their circumstances.’

在收集了数十年的证据后，艾伦得出结论，“我最初相信的一切都被证明是错误的”，而且后来被诊断出“明显大多数”的孩子“并不是天生患有多动症”。他们是根据自己的情况而出现这些问题的。

There was one crucial question, Alan said, that held the key to whether parents overcame these problems – one that seemed to me to tell us a lot about Sami’s work. It was: ‘Is there somebody giving you support?’ The families they studied sometimes got help from people around them. It usually wasn’t from a professional – they just found a supportive partner, or a group of friends.

艾伦说，有一个关键问题是父母能否克服这些问题的关键——在我看来，这个问题告诉了我们很多关于萨米工作的信息。问题是：“有人给你支持吗？”他们研究的家庭有时会得到周围人的帮助。通常不是来自专业人士——他们只是找到了一个支持的合作伙伴，或者一群朋友。

When their social support went up in this way, they found ‘the children are less likely to have problems at the next stage’. Why would this be?

当他们的社会支持以这种方式上升时，他们发现“孩子们在下一阶段出现问题的可能性较小”。为什么会这样呢？

Alan wrote: ‘Parents experiencing less stress can be more responsive to their infants; then infants can become more secure.’ This effect was so large that ‘the strongest predictor of positive change was an increase in social support available to the parents during the intervening years.’ Social support is, I reflected, the main thing Sami provides to families whose children struggle with attention.

艾伦写道：“压力较小的父母可以对婴儿做出更积极的反应；那么婴儿就会变得更有安全感。”这种效应如此之大，以至于“积极变化的最有力预测因素是父母在干预期间可获得的社会支持的增加。”我认为，社会支

持是萨米为他们提供的主要东西孩子难以受到关注的家庭。



Yet there's a challenge here. There is no question that when you give a child a stimulant like Adderall or Ritalin, their attention will significantly improve in the short term. All the experts I interviewed, wherever they stand on this debate, agreed with this, and I've seen it for myself.

然而这里存在一个挑战。毫无疑问，当您给孩子服用阿得拉或利他林等兴奋剂时，他们的注意力会在短期内显着提高。我采访过的所有专家，无论他们在这场辩论中的立场如何，都同意这一点，而且我亲眼目睹了这一点。

I knew a little boy who was constantly running around, shouting, and bouncing off the walls, who – when given Ritalin – sat still and was able to look people in the eye with a steady gaze for the first time in his life.

我认识一个小男孩，他经常跑来跑去，大喊大叫，从墙上弹跳，当他服用利他林时，他会安静地坐着，有生以来第一次能够用稳定的目光注视别人的眼睛。

The evidence is clear that this effect is real, and due to the drugs. I have plenty of adult friends who use stimulants when they have to blitz a work project, and it has the same effect on them. In Los Angeles in 2019, I caught up with my friend Laurie Penny, who is a British writer on various TV shows there, and she told me she uses prescribed stimulants when she wants to do a big writing job because they help her to concentrate. This seems to me like a reasonable decision for adults to take.

证据明确表明这种效果是真实的，并且是由药物造成的。我有很多成年朋友，当他们必须快速完成一个工作项目时，他们会使用兴奋剂，这对他们也有同样的效果。2019年在洛杉矶，我遇到了我的朋友劳里·佩妮(Laurie Penny)，她是一名英国作家，曾在当地的各种电视节目中露面，她告诉我，当她想做大量写作工作时，她会使用处方兴奋剂，因为它们可以帮助她集中注意力。在我看来，这对成年人来说是一个合理的决定。

But there is a reason why most doctors across the world are very

cautious about prescribing stimulant drugs to children, and no country (with the solitary exception of Israel) comes close to prescribing them as freely as the US.

但世界上大多数医生在给儿童开兴奋剂药物方面都非常谨慎，这是有原因的，而且没有一个国家（以色列除外）能够像美国一样自由地开出兴奋剂药物。

My concerns about this started to crystallise when I met with a woman named Nadine Ezard, who is the clinical director of alcohol and drug services at St Vincent's Hospital in Sydney. She's a doctor who works with people who have addiction problems, and by the time we met in 2015, Aussies were in the middle of a severe spike in methamphetamine addiction. For a while, doctors weren't sure how to respond. With heroin, there is a drug they could legally prescribe to addicted people that's a reasonable substitute, methadone – though with meth, there didn't seem to be one. So Nadine – along with a group of other doctors – was part of a crucial experiment, licensed by the government.

当我遇到一位名叫纳丁·埃扎德（Nadine Ezard）的女士时，我对此的担忧开始具体化，她是悉尼圣文森特医院酒精和药物服务的临床主任。她是一名医生，专门治疗有成瘾问题的人，当我们 2015 年见面时，澳大利亚人正处于甲基苯丙胺成瘾的严重高峰期。有一段时间，医生不确定如何应对。对于海洛因，他们可以合法地向成瘾者开出一种药物，它是一种合理的替代品，即美沙酮——尽管对于冰毒，似乎没有这样的药物。因此，纳丁和其他一群医生一起参与了一项得到政府许可的重要实验。

They started to give people addicted to meth a stimulant that is prescribed over a million times a year in the US for kids with ADHD – dextroamphetamine.

他们开始给冰毒成瘾者提供一种兴奋剂——右旋苯丙胺，在美国，这种兴奋剂每年为多动症儿童开出超过一百万次。

At the time that I spoke with her, they had already tried it with fifty people, and the results of a bigger experiment are going to be published after this book comes out.

在我与她交谈时，他们已经对五十个人进行了尝试，更大的实验结果将在本书出版后发表。

She told me that when they are given these stimulants, the people addicted to meth seemed to feel less craving, because it scratched some of the same itch: ‘They say that when they first start on it, it’s the first time in a long time their brain hasn’t been focused completely on meth.

她告诉我，当他们服用这些兴奋剂时，对冰毒上瘾的人似乎不再那么渴望，因为它能缓解一些同样的痒感：“他们说，当他们第一次开始使用冰毒时，这是很长一段时间以来的第一次他们的大脑并没有完全专注于冰毒。

That they suddenly feel this freedom.’ Speaking about one patient, she recalled: ‘He would be thinking about meth constantly.

他们突然感受到了这种自由。”谈到一位患者，她回忆道：“他会不断地想到冰毒。

He’d be in the supermarket, [or] wherever, [and] his constant decision making would be – “Am I going to have enough money left to buy crystal?” And then [giving him dextroamphetamine] relieved him from that.’ She compared it to giving nicotine patches to smokers.

他会在超市，[或]任何地方，[并且]他不断做出的决定是——“我还有足够的钱来购买水晶吗？”然后[给他右旋安非他明]让他摆脱了这种痛苦。”她将这与给吸烟者服用尼古丁贴片进行了比较。

She is not the only scientist discovering the similarities between methamphetamine and the other amphetamines the US routinely prescribes to children. Later, I went to see Carl Hart, professor of psychology at Columbia University, who had conducted experiments giving Adderall to people who were addicted to meth. When they were given in similar ways in the lab, these people with long-standing meth addictions responded in almost identical ways to Adderall and meth.

她并不是唯一一位发现甲基苯丙胺与美国常规给儿童开出的其他安非他明之间相似之处的科学家。后来，我去见了哥伦比亚大学心理学教授卡尔·哈特，他曾做过给冰毒成瘾者服用阿得拉的实验。当在实验室中以类似的方式给予这些药物时，这些长期吸食冰毒的人对阿得拉和冰毒的反应几乎相同。

Nadine's programme is a thoughtful, compassionate way to treat people with meth addictions – but I felt unsettled to learn that the drugs we give kids turn out to be a reasonable proxy for meth. Sami told me: 'It's a bit bizarre when you start realising that we are prescribing legally the same substances that you are saying on the other hand are very dangerous to take if you take them illicitly ... They're chemically similar. They work in a similar way.

纳丁的计划是一种深思熟虑、富有同情心的方式来治疗冰毒成瘾者，但当我得知我们给孩子们服用的药物实际上是冰毒的合理替代品时，我感到不安。萨米告诉我：“当你开始意识到我们合法开出的药物与你所说的非法服用的药物是非常危险的相同的药物时，这有点奇怪……它们在化学上是相似的。”他们的工作方式相似。

They work on very similar neurotransmitters.' But – as Nadine stressed to me – there are some important differences. They give higher doses to people recovering from meth addiction than children are given for ADHD.

它们作用于非常相似的神经递质。”但是，正如纳丁向我强调的那样，存在一些重要的差异。他们给从冰毒成瘾中恢复的人服用的剂量比治疗多动症的儿童服用的剂量更高。

They give them as pills, which releases them more slowly into your brain than smoking or injecting. And street drugs – because they are banned and have to be sold by criminals – contain all sorts of contaminants that aren't in the pills you get from a pharmacist.

他们以药丸的形式给予它们，这比吸烟或注射更缓慢地将它们释放到您的大脑中。街头毒品——因为它们被禁止并且必须由犯罪分子出售——含有各种污染物，而这些污染物是你从药剂师那里得到的药片中所没有的。

But still, it made me resolve to research the mass prescription of this drug to children some more.

但它仍然让我决心进一步研究这种药物对儿童的大规模处方。



For years, lots of parents were told that you could figure out if your

child has ADHD in a straightforward way, related to these drugs.

多年来，许多家长被告知，您可以通过直接的方式判断您的孩子是否患有与这些药物相关的多动症。

Many doctors told them that a normal child would become manic and high if they were given these pills, whereas an ADHD kid would slow down, focus and pay attention.

许多医生告诉他们，如果给正常的孩子服用这些药物，他们会变得躁狂和兴奋，而多动症的孩子会放慢速度，集中注意力。

But when scientists actually gave these drugs both to kids with attention problems and kids without attention problems, this turned out to be wrong. All children – indeed, all people – given Ritalin focus and pay attention better for a while. The fact the drug works isn't evidence that you had an underlying biological problem all along – it's just proof that you are taking a stimulant. This is why, during the Second World War, radar operators were given stimulants by the army – it made it easier for them to continue to focus on the very boring job of watching a mostly unchanging screen.

但当科学家实际上将这些药物同时给予有注意力问题的孩子和没有注意力问题的孩子时，结果证明这是错误的。所有的孩子——实际上是所有的人——服用利他林后，注意力会在一段时间内得到更好的集中。该药物有效的事实并不能证明您一直存在潜在的生物学问题，而只是证明您正在服用兴奋剂。这就是为什么在第二次世界大战期间，军队给雷达操作员注射兴奋剂——这让他们更容易继续专注于观看几乎不变的屏幕这一非常无聊的工作。

It's also why people who snort a line of stimulants then become very boring and go off on long monologues – they become very focused on their own train of thought, and filter out the bored-to-tears look on your face.

这也是为什么那些吸了一系列兴奋剂的人会变得非常无聊并开始长篇独白——他们变得非常专注于自己的思路，并过滤掉你脸上无聊到流泪的表情。

There is scientific evidence that there are several risks associated with giving these drugs to kids. The first risk associated with these

drugs is physical – there is evidence that taking stimulants stunts a child's growth.

有科学证据表明，给孩子服用这些药物存在多种风险。与这些药物相关的第一个风险是身体上的——有证据表明服用兴奋剂会阻碍孩子的成长。

Kids taking a standard dose are about three centimetres shorter, over a three-year period, than they would have otherwise been. Several scientists have also warned that stimulants increase the risk of a child having heart problems and dying as a result.

服用标准剂量的孩子在三年内比不服用标准剂量的孩子矮了约三厘米。一些科学家还警告说，兴奋剂会增加儿童患心脏病和死亡的风险。

Obviously, heart problems are rare among children – but when millions of kids are taking these drugs, even a small increase in risk means a real rise in deaths.

显然，心脏问题在儿童中很少见，但当数百万儿童服用这些药物时，即使风险的小幅增加也意味着死亡人数的真正增加。

But James Li, assistant professor of psychology, who I went to see at the University of Wisconsin in Madison, told me about what I found to be the most worrying thing. He explained: ‘We simply don't know the long-term effects.

但我去威斯康星大学麦迪逊分校拜访的心理学助理教授詹姆斯·李告诉我，我发现最令人担忧的事情。他解释说：“我们根本不知道长期影响。

That's a fact.’ Most people assume – I certainly did – that these drugs have been tested and found to be safe, but he explained ‘there hasn't been a lot of research done on long-term consequences to brain development’.

这是事实。大多数人都认为——我当然也这么认为——这些药物已经过测试并被证明是安全的，但他解释说，“目前还没有对大脑发育的长期影响进行大量研究”。

This is especially concerning, he says, since ‘we're so quick to give them to young kids. Kids are our most vulnerable population, because

their brains are developing ... These are drugs that operate directly on the brain, right? It's not an antibiotic.'

他说，这尤其令人担忧，因为“我们很快就把它们送给了小孩子”。儿童是我们最脆弱的人群，因为他们的大脑正在发育……这些是直接作用于大脑的药物，对吧？它不是抗生素。

He showed me that the best long-term research we have is in animal studies – where the findings are sobering. I read them, and they show that if you give adolescent rats Ritalin for three weeks – which is the equivalent of giving it to a human for several years – you find that the striatum, a crucial part of the brain that deals with experiencing rewards, shrinks significantly in adolescent rats. He said that you can't assume that these drugs will affect humans the same way they affect rats, and he stressed there are some benefits to taking these drugs – but we need to be aware 'there's the benefit, and there's the risk. What we currently operate under is the short-term benefit.'

他向我展示了我们最好的长期研究是动物研究——其研究结果发人深省。我读了它们，它们表明，如果你给青春期老鼠服用利他林三周——这相当于给人类服用几年——你会发现纹状体，大脑中负责体验奖励的重要部分，青春期大鼠的体积显著缩小。他说，你不能假设这些药物会像影响老鼠一样影响人类，他强调服用这些药物有一些好处，但我们需要意识到“有好处，也有风险”。我们目前的运作是为了短期利益。”

When I interviewed other scientists, I also learned that the positive effects of these drugs – while real – are surprisingly limited. At New York University, Xavier Castellanos – a professor of child and adolescent psychiatry – explained to me that the best research on the effects of stimulants found something important. They improve a child's behaviour on tasks that require repetition, but they do *not* improve their learning. I frankly didn't believe him, but then I went and looked it up in the study that the supporters of stimulant prescription had directed me to as the gold standard on ADHD research.

当我采访其他科学家时，我还了解到这些药物的积极作用虽然确实存在，但却非常有限。纽约大学的儿童和青少年精神病学教授泽维尔·卡斯特拉诺斯 (Xavier Castellanos) 向我解释说，关于兴奋剂影响的最佳研究发现了一些重要的东西。它们改善了孩子在需要重复的任务上的行为，但并没有改善他们的学习。坦率地说，我不相信他，但后来我去查阅了兴奋剂处方支持者指导我作为多动症研究黄金标准的研究。

After fourteen months on stimulants, kids performed 1.8 percent better on academic tests. But kids who for the same amount of time were simply given guidance on their behaviour improved by 1.6 percent.

使用兴奋剂 14 个月后，孩子们在学业测试中的表现提高了 1.8%。但在同样的时间内，仅仅接受行为指导的孩子的成绩提高了 1.6%。

Just as critically, the evidence suggests that the initial positive effects of stimulants don't last. Anyone who takes stimulants develops tolerance for the drug – your body gets used to it, so you need a higher dose to get the same effect.

同样重要的是，有证据表明兴奋剂最初的积极作用不会持久。任何服用兴奋剂的人都会对该药物产生耐受性——您的身体会习惯它，因此您需要更高的剂量才能获得相同的效果。

Eventually, you hit the maximum dose kids are allowed to take.

最终，您达到了允许孩子服用的最大剂量。

One of the most alarmed scientists I spoke with was Dr Charles Czeisler, the sleep expert at Harvard Medical School, who told me that one of the main effects of taking stimulants is that you sleep less.

我采访过的最令人震惊的科学家之一是哈佛医学院的睡眠专家查尔斯·切斯勒博士，他告诉我服用兴奋剂的主要影响之一是你睡得更少。

This, he explained, has very worrying implications for the development of young people's brains – particularly all the young people he sees using them so they can study longer and longer hours. 'The pushing of all these amphetamines for these kids reminds me of the opioid crisis, except nobody's talking about it,' he said. 'When I was a kid, if people gave me amphetamines, sold them to children, they would go to jail. But just like the opioid crisis ... nobody does anything about it. It's a dirty little secret in our society.'

他解释说，这对年轻人大脑的发育产生了非常令人担忧的影响，特别是他看到的所有年轻人都使用大脑来学习越来越长的时间。“向这些孩子推销所有这些安非他明让我想起了阿片类药物危机，但没有人谈论它，”他说。“当我还是个孩子的时候，如果人们给我安非他命，然后把它们卖给孩子，他们就会进监狱。但就像阿片类药物危机一样……没有

人对此采取任何行动。这是我们社会中一个肮脏的小秘密。

Most of the scientists I interviewed in the US – and I talked with a lot of the most prestigious experts on ADHD – told me that they believe prescribing stimulants is safe and provides a lot of benefits that outweigh the risks.

我在美国采访过的大多数科学家——以及我与许多最负盛名的注意力缺陷多动症专家交谈过——告诉我，他们认为服用兴奋剂是安全的，并且带来的好处大于风险。

Indeed, many US scientists argue that presenting the counterarguments – as I am doing here – is actively dangerous: it will, they say, make parents less likely to bring their kids forward to be prescribed stimulants, and as a result, those children will needlessly suffer and do worse in their lives.

事实上，许多美国科学家认为，提出反驳意见——就像我在这里所做的那样——是非常危险的：他们说，这会让父母不太可能带孩子去服用兴奋剂，结果，这些孩子会不必要地在他们的生活中遭受痛苦并做得更糟。

They also believe it may make some people quit these drugs abruptly, which is dangerous – they could go through a horrible physical withdrawal.

他们还认为，这可能会让一些人突然戒掉这些药物，这是危险的——他们可能会经历可怕的身体戒断。

But in the rest of the world, scientific opinion is more divided, and it's more common to hear scepticism or outright opposition to this approach.

但在世界其他地方，科学观点更加分歧，更常见的是听到对这种方法的怀疑或彻底反对。



There is one decisive reason why many people – like the woman I met on the Amtrak – are persuaded that their child's attention problems are largely the result of a physical disorder.

许多人（比如我在美铁上遇到的那位女士）都相信，孩子的注意力问题很大程度上是由身体疾病造成的，这是有一个决定性原因的。

It is because they have been told that this is a problem caused primarily by their child's genetic make-up. As I mentioned before, Professor Stephen Hinshaw told me that genes explain '75 to 80 percent' of the problem, and even higher figures are often put forward. If this is a mainly biological problem, then a mainly biological solution intuitively makes sense – and the kind of interventions Sami and others argue for can only ever be additional extras. When I dug into this, I came to believe that the truth is complicated – and doesn't really fit with the strident claims of either side of this polarised debate.

这是因为他们被告知这是一个主要由孩子的基因构成引起的问题。正如我之前提到的，Stephen Hinshaw 教授告诉我，基因可以解释“75% 到 80%”的问题，甚至经常提出更高的数字。如果这主要是一个生物学问题，那么直观上来说，主要是生物学的解决方案是有意义的——而萨米和其他人所主张的干预措施只能是额外的补充。当我深入研究这个问题时，我开始相信事实很复杂——而且与这场两极分化辩论中双方的尖锐主张并不相符。

I was keen to understand: where do these statistics showing that a very high percentage of ADHD is caused by a genetic disorder come from?

我很想知道：这些表明 ADHD 很大比例是由遗传性疾病引起的统计数据从何而来？

I was surprised to learn, from the scientists who put these statistics forward, that they do not come from any direct analysis of the human genome. Almost all of it comes from a much simpler method, known as twin studies. They take a pair of identical twins.

我很惊讶地从提出这些统计数据的科学家那里得知，它们并不是来自对人类基因组的任何直接分析。几乎所有这些都来自一种更简单的方法，称为双胞胎研究。他们收养了一对同卵双胞胎。

If one of them has been diagnosed with ADHD, they ask, Has the other twin been diagnosed with it too? Then they take a pair of non-identical twins. If one of them has been diagnosed with ADHD, they

ask, Has the other twin been diagnosed with it? They then repeat this many times, until they have a big enough sample, and they compare the figures.

如果其中一个被诊断出患有多动症，他们会问，另一个双胞胎也被诊断出患有这种疾病吗？然后他们收养了一对异卵双胞胎。如果其中一个被诊断出患有多动症，他们会问，另一个双胞胎也被诊断出患有这种疾病吗？然后，他们多次重复此操作，直到获得足够大的样本，然后比较这些数字。

The reason they do this is simple. All sets of twins in these studies – whether they are identical or not – grow up in the same home, with the same family, so they figure if you find a difference between the two types of twin, they reason, it can't be down to their environment.

他们这样做的原因很简单。这些研究中的所有双胞胎——无论是否同卵——都在同一个家庭、同一个家庭中长大，因此他们认为，如果你发现这两种类型的双胞胎之间存在差异，他们认为，这不可能是取决于他们的环境。

The difference has to be explained instead by their genes. Identical twins are much more genetically similar to each other than non-identical twins, so if you discover that something is more common among identical twins, the scientists conclude there's a genetic component.

这种差异必须由他们的基因来解释。同卵双胞胎在基因上比异卵双胞胎更加相似，所以如果你发现同卵双胞胎之间有一些更常见的东西，科学家们就会得出结论，其中存在遗传成分。

You can figure how much is determined by genes by seeing how big this gap is. This method has been used for years by all sorts of highly reputable scientists.

通过观察这个差距有多大，你就可以知道基因决定了多少。这种方法已被各种享有盛誉的科学家使用多年。

Whenever scientists investigate ADHD in this way, they *always* find that identical twins are much more likely to both be diagnosed than non-identical twins. Over twenty studies have found this result – it's consistent. This is where the very high odds on ADHD being genetically determined come from.

每当科学家以这种方式研究多动症时，他们总是发现同卵双胞胎比异卵双胞胎更有可能被诊断出来。二十多项研究发现了这个结果——它是一致的。这就是 ADHD 由基因决定的极高几率的来源。

But a small group of scientists have been asking if there is a serious problem with this technique. I spoke with one of the people who has made this case in the greatest scientific detail, Dr Jay Joseph, who is a psychologist in Oakland, California. He talked me through the facts. It has been proven – in a different set of scientific studies – that identical twins do *not* actually experience the same environments as non-identical twins. Identical twins spend more time together than non-identical twins. They are treated more alike – by their parents, friends and schools (indeed, often people can't tell them apart).

但一小群科学家一直在询问这项技术是否存在严重问题。我采访了杰伊·约瑟夫博士，他是一位以最科学的细节阐述这一案例的人，他是加利福尼亚州奥克兰市的一名心理学家。他向我讲述了事实。在一组不同的科学研究中已经证明，同卵双胞胎实际上并没有经历与异卵双胞胎相同的环境。同卵双胞胎比异卵双胞胎在一起的时间更多。他们受到的父母、朋友和学校的对待更加相似（事实上，人们常常无法区分他们）。

They are more likely to become confused about their identity and to feel merged with their twin. They are psychologically closer. Jay told me that in most respects, 'their environment's more similar ... They're copying each other's behaviour more. They're being treated more alike. All of these things lead to more similar behaviour – whatever the behaviour may be.'

他们更有可能对自己的身份感到困惑，并感觉自己与双胞胎融为一体。他们在心理上更接近。杰伊告诉我，在大多数方面，“他们的环境更加相似……他们更多地模仿彼此的行为。”他们受到的待遇更加相似。所有这些都会导致更多相似的行为——无论是什么行为。

So, he explained, there is something *other* than genes that could explain the gap that's showing up in all these studies.

因此，他解释说，除了基因之外，还有一些东西可以解释所有这些研究中出现的差距。

It could be accounted for by the fact that 'identical twins grow up in a much more similar behaviour-shaping environment than non-identical twins.' Their attention problems may be more alike not because their

genes are more similar, but because their lives are more similar.

这可以用以下事实来解释：“同卵双胞胎在比异卵双胞胎更相似的行为塑造环境中长大。”他们的注意力问题可能更相似，不是因为他们的基因更相似，而是因为他们的生活不同。更相似。

If there are factors in the environment causing attention problems, identical twins are more likely to both experience them to the same extent than non-identical twins.

如果环境中存在引起注意力问题的因素，那么同卵双胞胎比异卵双胞胎更有可能在相同程度上经历这些问题。

So, he explains, ‘Twin studies are unable to disentangle the potential influences of genes and environment.’ This means the statistics we often hear – of 75 to 80 percent of ADHD being due to genetics, for example – are built on an unreliable foundation.

因此，他解释说，“双胞胎研究无法理清基因和环境的潜在影响。”这意味着我们经常听到的统计数据——例如 75% 到 80% 的多动症是由遗传引起的——是建立在不可靠的基础上的。

Such figures are, Jay says, ‘misleading, and misunderstood’.

杰伊说，这些数字“具有误导性和误解”。

It seemed to me implausible that so many prominent scientists would draw on this technique if it was so flawed. I was conscious that in my previous books, I drew on evidence from twin studies myself.

在我看来，如果这项技术有如此大的缺陷，那么这么多杰出的科学家竟然会利用它，这似乎令人难以置信。我意识到，在我之前的书中，我自己借鉴了双胞胎研究的证据。

But when I asked some scientists who argue that ADHD is primarily genetically driven about the flaws in these studies, many of them readily conceded that these criticisms have some legitimacy, in a way that was disarming.

但当我向一些认为多动症主要是由基因驱动的科学家长问这些研究中的缺陷时，他们中的许多人欣然承认这些批评有一定的合理性，在某种程度上让人解除了戒心。

Usually, they would then simply switch the conversation onto other reasons why we should believe this is a genetically based problem.

通常，他们会简单地把话题转到我们应该相信这是一个基于基因的问题的其他原因上。

(I'll come to them in a moment.) I came to believe that twin studies are a kind of zombie technique, which people keep referencing even though they know they can't fully defend it, because it tells us what we want to hear – that this problem is mostly in our kids' genes.

（我稍后会谈到他们。）我开始相信双胞胎研究是一种僵尸技术，人们不断引用这种技术，即使他们知道自己无法完全捍卫它，因为它告诉我们我们想要什么听说——这个问题主要是我们孩子的基因造成的。

When you set aside these twin studies, Professor James Li told me, 'time after time, every single study' looking at the role any individual gene plays in causing ADHD finds that 'no matter how you measure [it], it is always small.

当你把这些双胞胎研究放在一边时，詹姆斯·李教授告诉我，“一次又一次，每一项研究”着眼于任何单个基因在导致多动症中所起的作用，发现“无论你怎么测量它，它总是很小”。

The effect of the environment is always bigger.' So as I absorbed all this, I began to ask myself – does this mean genes play no role in ADHD? There are some people who get close to arguing this – and that is where I think the ADHD-sceptics go too far.

环境的影响总是更大。”当我吸收了这一切后，我开始问自己——这是否意味着基因在多动症中不起作用？有些人对此几乎持反对意见——我认为多动症怀疑论者在这方面走得太远了。

James explained to me that although the twin studies overestimate the role of genes, there's a new technique called SNP heritability, which figures out how much of a characteristic is genetically driven by using a different method from twin studies. Instead of comparing types of twin, these studies compare the genetic make-up of two totally unrelated people.

James 向我解释说，虽然双胞胎研究高估了基因的作用，但有一种称为 SNP 遗传力的新技术，它可以通过使用与双胞胎研究不同的方法来计

算出一个特征有多少是由基因驱动的。这些研究不是比较双胞胎的类型，而是比较两个完全不相关的人的基因组成。

It could pluck, say, you and me, and see whether match-ups in genes between us correlate with a problem we might both have – like (say) depression or obesity or ADHD. These studies currently find that around 20 to 30 percent of attention problems relate to your genes.

比如说，它可以挑选你和我，看看我们之间的基因匹配是否与我们都可能患有的问题相关——比如（比如）抑郁症、肥胖症或多动症。目前这些研究发现，大约 20% 到 30% 的注意力问题与基因有关。

James told me that this is a new way of studying the question and it only looks at common variation genes, so in the end the proportion caused by our genetics might end up being somewhat more than that.

詹姆斯告诉我，这是研究这个问题的一种新方法，它只关注常见的变异基因，所以最终由我们的遗传学引起的比例可能会比这个多一些。

So it's wrong, he explained, to dismiss a genetic component – but it's also wrong to say it's all or most of the problem.

他解释说，因此忽视遗传因素是错误的，但说这是全部或大部分问题也是错误的。



One of the people who most helped me to understand some aspects of these questions was Professor Joel Nigg, who I interviewed at Oregon Health and Science University in Portland. He is the former president of the International Society for Research in Child and Adolescent Psychopathology, and a leading figure in this field.

对我理解这些问题的某些方面最有帮助的人之一是乔尔·尼格教授，我在波特兰的俄勒冈健康与科学大学采访了他。他是国际儿童和青少年精神病理学研究学会前主席，也是该领域的领军人物。

He told me it used to be thought that some kids were simply wired by their genes to be different and to develop different brains. But – as he has written – now ‘the science has moved on’. The latest research shows that ‘genes aren’t destiny; rather they affect probability.’ Alan Sroufe, who did the long-term study into what factors cause ADHD,

said the same: ‘Genes don’t operate in a vacuum.

他告诉我，人们过去认为有些孩子只是因为基因的影响而与众不同，并发育出不同的大脑。但是，正如他所写，现在“科学已经向前发展”。最新研究表明，“基因不是命运，而是命运”。相反，它们会影响概率。”对导致多动症的因素进行了长期研究的艾伦·斯鲁夫（Alan Sroufe）也说了同样的话：“基因不会在真空中运作。

That’s the main thing we’ve learned from gene studies ... Genes are turned on and off in response to environmental input.’ As Joel puts it, ‘our experiences literally get under our skin’ and change how our genes are expressed.

这是我们从基因研究中学到的主要内容……基因会根据环境输入而开启和关闭。”正如乔尔所说，“我们的经历实际上深入我们的皮肤”并改变了我们基因的表达方式。

To help me think about how this works, Joel offered me an analogy. He explains: ‘If your child is tired and run down, she will catch a cold at school more easily in the winter. She is more susceptible’ – but ‘if there was no cold virus’, then neither an exhausted kid nor a well-rested one would get a cold.

为了帮助我思考这是如何运作的，乔尔给我做了一个类比。他解释说：“如果你的孩子感到疲倦和疲惫，冬天她在学校会更容易感冒。她更容易受到影响”——但是“如果没有感冒病毒”，那么无论是疲惫的孩子还是休息良好的孩子都不会感冒。

Similarly, your genes might make you more vulnerable to a trigger in the environment – but there still has to be a trigger in the environment. He writes: ‘In some ways, the truly big news about ADHD today is that we’ve revived our interest in the environment.’

同样，你的基因可能会让你更容易受到环境中触发因素的影响——但环境中仍然必须有触发因素。他写道：“从某些方面来说，今天关于多动症的真正大新闻是我们重新恢复了对环境的兴趣。”

Joel believes there is some role for stimulants. He says that in a bad situation, he believes they are better than nothing, and can give kids and parents some real relief. ‘I’m splinting a broken bone in a battlefield. I’m not healing it, you know?

乔尔认为兴奋剂有一定作用。他说，在糟糕的情况下，他相信有总比

没有好，可以给孩子和家长带来真正的安慰。“我在战场上用夹板固定断骨。我不会治愈它，你知道吗？”

But at least the guy can walk off, even if he might have a crooked leg the rest of his life.’

但至少这个人可以走开，即使他的余生可能都是一条弯曲的腿。”

But if we are going to do that, he said, we crucially also need to ask: ‘Where is the problem located?’

但如果我们要这样做，他说，我们还需要问：‘问题出在哪里？’

Do we need to look at what our kids are facing?’ He says that kids at the moment face many large forces that we know harm their attention – stress, poor nutrition, pollution: all things I was going to investigate more after learning about them from him.

我们需要看看我们的孩子面临着什么吗？”他说，孩子们目前面临着许多我们知道会损害他们注意力的巨大力量——压力、营养不良、污染：所有这些都是我在了解他们之后要进行更多调查的事情。从他身上。

‘I would say we should not accept those things. We should not accept that our kids have to grow up in a chemical soup [of pollutants], for example.

“我想说我们不应该接受这些事情。例如，我们不应该接受我们的孩子必须在[污染物]化学汤中长大。

We shouldn’t accept that they have to grow up with grocery stores that hardly have any food in them that’s really food ... That should change ... For some kids, there’s actually something wrong with them because their environment has injured them.

我们不应该接受这样的事实：他们必须在杂货店里长大，里面几乎没有任何真正的食物……这应该改变……对于一些孩子来说，他们实际上有问题，因为他们的环境伤害了他们。

In that case, it’s a bit criminal to say nothing more than, in effect, “Let’s placate them with medications so that they can cope with this damaging environment we’ve created.” How is that different from

giving sedatives to prisoners so they can handle being in prison?’ He believes you can only ethically give out drugs if you are also at the same time trying to solve the deeper problem.

在这种情况下，事实上，仅仅说“让我们用药物安抚他们，这样他们就能应对我们创造的这种破坏性环境”就有点犯罪了。这与向囚犯提供镇静剂以便他们能够应对监狱有什么不同？”他认为，只有在同时尝试解决更深层次问题的情况下，才能合乎道德地分发药物。

He looked sombre, and said: ‘There’s the old metaphor that ... villagers are at the river one day, and they notice a dead body come floating down the river. So they do the right thing. They take it out and they give it an appropriate burial.

他面色阴沉，说道：“有一个古老的比喻……有一天，村民们在河边，他们注意到一具尸体顺流而下。所以他们做了正确的事。他们把它拿出来，并给它一个适当的埋葬。

The next day two bodies come down the river and they do the appropriate thing and they bury the bodies. This goes on for a while, and finally they start to wonder – I wonder where these bodies are coming down the river [from], and if we should do something to stop that? So they go up the river to find out.’

第二天，两具尸体顺流而下，他们做了适当的事情，埋葬了尸体。这种情况持续了一段时间，最后他们开始怀疑——我想知道这些尸体是从哪里顺流而下的，我们是否应该采取措施阻止这种情况发生？于是他们就逆流而上去寻找答案。

He leaned forward in his chair and said: ‘We can treat these kids – but sooner or later, we need to figure out why is this happening.’ I realised it was time for me to go upriver.

他在椅子上倾身说道：“我们可以治疗这些孩子，但迟早我们需要弄清楚为什么会发生这种情况。”我意识到是时候去上游了。

Cause Twelve: The Confinement of Our Children, Both Physically and Psychologically

14

14 原因十二：对孩子身体和心理的限制

A few years ago I was sitting drinking coffee at sunset in a small village at the edge of a forest in Cauca, in the south-west of Colombia. A few thousand people lived there, growing the caffeinated drinks that we glug across the world to keep ourselves alert. I watched them as they slowly unwound for the day.

几年前，日落时分，我坐在哥伦比亚西南部考卡森林边缘的一个小村庄里喝咖啡。有几千人住在那里，种植含咖啡因的饮料，我们在世界各地喝这些饮料以保持警惕。我看着他们一天中慢慢放松。

The adults had put tables and chairs out on the street, and they were talking and chatting in the shadow of a lush green mountain. I looked on as they wandered from table to table, when I noticed something that I rarely see in the Western world any more.

大人们在街边摆好了桌椅，在青山绿荫下有说有笑。我看着他们从一张桌子走到另一张桌子，这时我注意到了一些我在西方世界很少看到的东西。

All across the village, children were playing freely, without adults watching over them. Some had a hoop they were rolling along the ground in a group.

整个村子里，孩子们在没有大人看管的情况下自由自在地玩耍。有些人手里拿着一个铁环，他们成群结队地在地上滚动。

Some were chasing each other around at the edge of the forest, and daring each other to run in, only to dash out again thirty seconds later, shrieking and laughing.

有些人在森林边缘互相追逐，互相试探着跑进去，但三十秒后又尖叫着大笑地冲了出去。

Even very small children – they seemed to be three or four – were running around with just other kids to look out for them. Occasionally, one of the children would fall over and run back to their mother.

即使是很小的孩子——他们似乎只有三四岁——也和其他孩子一起跑来跑去寻找他们。偶尔，其中一个孩子会摔倒并跑回母亲身边。

The rest only returned home when their parents called for them at eight in the evening, and the streets would finally empty.

其余的人直到晚上八点父母喊他们才回家，街道上终于空了。

It occurred to me that this is what childhood looked like for my parents, in very different places – an Alpine Swiss village, and a working-class Scottish tenement. They ran around freely without their parents for most of the day from when they were quite small, and only returned to eat and sleep. This is, in fact, what childhood looked like for all of my ancestors, so far as I can tell, going back thousands of years.

我突然想到，这就是我父母的童年，他们生活在截然不同的地方——一个瑞士阿尔卑斯山的村庄，一个苏格兰工人阶级的公寓。从很小的时候起，他们就在没有父母陪伴的情况下自由地奔跑，只回来吃饭和睡觉。事实上，据我所知，这就是我所有祖先的童年，可以追溯到几千年前。

There are periods when some children didn't live like this – when they were forced to work in factories, for example, or during the living nightmare of chattel slavery – but in the long human story, these are extreme exceptions.

在某些时期，一些孩子的生活并非如此——例如，当他们被迫在工厂工作时，或者在动产奴隶制的活生生的噩梦中——但在漫长的人类历史中，这些都是极端的例外。

Today, I don't know any children who live like that. In the past thirty years there have been huge changes in childhood. By 2003, in the US only 10 percent of children spent any time playing freely outdoors on a regular basis.

今天，我不知道有哪个孩子是这样生活的。在过去的三十年里，童年发生了巨大的变化。到 2003 年，在美国，只有 10% 的儿童经常在户外自由玩耍。

Childhood now happens, overwhelmingly, behind closed doors, and when they do get to play, they are supervised by grown-ups, or it takes place on screens. The way children spend their time at school has also changed dramatically.

现在，童年绝大多数是在关起门来度过的，当他们真正玩耍时，他们会受到成年人的监督，或者发生在屏幕上。孩子们在学校度过时间的方式也发生了巨大变化。

The school systems in the US and Britain have been redesigned by politicians so that teachers are forced to spend the majority of their time preparing and drilling children for tests. In the US, only 73 percent of elementary schools now have *any* form of recess. Free play and free enquiry have fallen off a cliff.

美国和英国的学校系统已被政治家重新设计，教师被迫花费大部分时间为孩子们进行考试准备和训练。在美国，目前只有 73% 的小学提供任何形式的课间休息。自由发挥和自由探究已经跌落悬崖。

These changes have happened so quickly, and all at once, that it's hard to scientifically measure the effects this transformation might be having on children's ability to pay attention and focus.

这些变化发生得如此之快，而且是同时发生的，以至于很难科学地衡量这种转变可能对儿童注意力和集中力的能力产生的影响。

We can't randomly assign some kids to live freely in that village in Cauca, and some to live indoors in an American suburb, and come back to see how well they focus. But there is, I believe, a way we can begin to figure out some of the effects of this shift.

我们不能随机分配一些孩子在考卡的那个村庄自由生活，而另一些孩子则在美国郊区的室内生活，然后回来看看他们的注意力集中程度如何。但我相信，我们可以通过一种方法开始弄清楚这种转变的一些影响。

We can do it if we break down this big transformation into its smaller constituent parts, and see what the science tells us about those effects.

如果我们将这一大转变分解为更小的组成部分，并看看科学告诉我们这些影响，我们就可以做到这一点。

One of the ways I did this was by following the story of a remarkable woman I got to know named Lenore Skenazy. She's not a scientist. She's an activist. She was driven to try to understand how this transformation is affecting kids because of a shocking experience she had in her own life.

我做到这一点的方法之一是遵循我认识的一位名叫莱诺·斯科纳齐 (Lenore Skenazy) 的杰出女性的故事。她不是科学家。她是一位活动家。由于她自己生活中的一次令人震惊的经历，她被迫尝试了解这种转变如何影响孩子们。

It led her to start to work with some of the best social scientists studying these questions. Together with them, she has pioneered practical proposals to understand why so many more kids seem to be struggling to focus – and how to restore it.

这促使她开始与一些最优秀的社会科学家合作研究这些问题。她与她们一起提出了实用的建议，以了解为什么越来越多的孩子似乎难以集中注意力，以及如何恢复注意力。



In the 1960s, in a suburb of Chicago, a five-year-old girl walked out of her house, alone. It was a fifteen-minute walk to Lenore's school, and

every day she did it by herself.

20世纪60年代，在芝加哥郊区，一个五岁的女孩独自走出家门。步行到莱诺尔的学校需要十五分钟，而且她每天都是自己去学校。

When she got to the road near school, she was helped to safely cross by another child, a ten-year-old boy wearing a yellow sash across his chest, whose job was to stop the cars and shepherd the smaller kids across the tarmac.

当她到达学校附近的道路时，另一个孩子帮助她安全地过马路，这是一个胸前系着黄色腰带的十岁男孩，他的工作是拦住汽车并引导较小的孩子穿过停机坪。

At the end of each school day, Lenore would walk out of the gates, again without an adult, and she would wander the neighbourhood with her friends, or try to spot four-leaf clovers, which she collected.

每天放学后，莱诺尔都会走出校门，同样没有成人陪伴，她会和朋友们在附近闲逛，或者尝试寻找她收集的四叶草。

There was often a kickball game going on outside her house that the kids would spontaneously organise and sometimes she would join in.

她家外面经常有孩子们自发组织的踢球比赛，有时她也会参加。

By the time she was nine years old, when she felt like it, she would get on her bike and ride a few miles to the library to pick out books, and then curl up reading them somewhere quiet. At other times, she'd knock on her friends' doors to see if they wanted to play.

当她九岁的时候，当她愿意的时候，她会骑上自行车，骑几英里去图书馆挑选书籍，然后蜷缩在一个安静的地方阅读。其他时候，她会敲朋友的门，看看他们是否想玩。

If Joel was home, they'd play Batman, and if Betsy was home, they'd play Princess and the Witch. Lenore always insisted on being the witch. Finally, when she was hungry or it started to get dark, she went home.

如果乔尔在家，他们就会扮演蝙蝠侠，如果贝特西在家，他们就会扮演

公主和女巫。莱诺尔始终坚持自己是女巫。最后，当她饿了或者天黑了的时候，她就回家了。

To many of us, this scene now seems jarring, or even shocking.

对于我们许多人来说，这一幕现在看起来很刺耳，甚至令人震惊。

Across the US over the past decade, there have been many instances where people have seen children as old as nine walking unaccompanied in the street and they've called the police to report it as a case of parental negligence.

过去十年来，在美国各地，发生了很多这样的情况：人们看到九岁大的孩子在无人陪伴的情况下在街上行走，他们报警称这是父母疏忽的案件。

But in the 1960s, this was the norm all over the world. Almost all children's lives looked something like this. Being a kid meant you went out into your neighbourhood and you wandered around, found other kids, and made up your own games.

但在 20 世纪 60 年代，这已成为全世界的常态。几乎所有孩子的生活都是这样的。作为一个孩子，你意味着你到你的社区里去闲逛，找到其他的孩子，并制作你自己的游戏。

Adults had only a vague idea where you were. A parent who kept their child indoors all the time, or walked them to school, or stood over them while they played, and intervened in their games, would have been regarded as crazy.

成年人对你在哪里只有一个模糊的概念。如果父母一直把孩子留在室内，或者送他们去学校，或者在他们玩耍时站在他们旁边，并干预他们的游戏，会被认为是疯狂的。

By the time Lenore had grown up and had her own children, in New York City in the 1990s, everything had changed. She was expected to walk her own children to school and wait while they went through the gates, and then pick them up at the end of the day. Nobody let their kids out to play unsupervised, ever. Children stayed in the home all the time, unless there was an adult to watch over them.

20 世纪 90 年代的纽约，当 Lenore 长大并有了自己的孩子时，一切

都发生了变化。她要送自己的孩子去学校，等他们进校门，然后在一天结束时接他们。从来没有人让自己的孩子在无人看管的情况下出去玩耍。孩子们一直呆在家里，除非有大人看管他们。

One time, Lenore took her family to a resort in Mexico, and the kids would gather every morning on the beach and play, usually at whatever game they made up among themselves. It was the only time she had ever seen her son get up before her.

有一次，莱诺尔带着家人去墨西哥的一个度假胜地，孩子们每天早上都会聚集在海滩上玩耍，通常玩他们自己编的任何游戏。这是她唯一一次看到儿子在她面前起身。

He would race to the beach to find the other kids. She had never seen her son so gleeful. Lenore told me: ‘What I realised is that for one week, he had what I had for my entire childhood – which was the ability to go outside, meet up with friends, and play.’

他会跑到海滩去寻找其他孩子。她从来没有见过儿子这么高兴。莱诺尔告诉我：“我意识到，在一周的时间里，他拥有了我整个童年所拥有的东西——那就是出去、与朋友见面和玩耍的能力。”

Lenore thought that back home, her nine-year-old son, Izzy, still needed to have some small taste of freedom if he was going to mature.

莱诺认为，在家里，她九岁的儿子伊兹（Izzy）如果想成熟，仍然需要尝尝自由的滋味。

So when, one day, he asked her if he could be taken to a place in New York he'd never been to before and then be left to find his own way home, it struck her as a good idea.

因此，有一天，当他问她是否可以带他去纽约一个他以前从未去过的地方，然后让他自己寻找回家的路时，她觉得这是个好主意。

Her husband sat on the floor with him and helped him plan out the route he would take, and one sunny Sunday, she took him to Bloomingdales, and – with a little catch in her heart – they parted ways. An hour later, he appeared at the door of their apartment.

她的丈夫和他一起坐在地板上，帮助他计划好要走的路线，一个阳光

明媚的周日，她带他去了布鲁明戴尔百货公司，然后——心里有点忐忑——他们分道扬镳了。一个小时后，他出现在他们的公寓门口。

He had taken a subway and a bus, alone. ‘He was very happy – I’d say he was levitating,’ she recalls.

他一个人坐过地铁和公交车。“他非常高兴——我想说他就像漂浮在空中一样，”她回忆道。

It seemed like such a common-sense thing to do that Lenore – who was a journalist – wrote an article telling this story, so other parents would have the confidence to do the same thing.

身为记者的莱诺尔写了一篇文章讲述这个故事，这似乎是一件常识性的事情，这样其他父母就有信心做同样的事情。

Then something strange happened. Lenore’s article was greeted with horror and revulsion. She was denounced on many of the top news shows in the United States as ‘America’s worst mom’.

然后奇怪的事情发生了。莱诺尔的文章引起了人们的恐惧和反感。她在美国许多顶级新闻节目中被谴责为“美国最糟糕的妈妈”。

She was slammed as shamefully neglectful, and she was told that she had put her own child at terrible risk.

她被批评为可耻的疏忽，并被告知她将自己的孩子置于可怕的危险之中。

She was invited to appear on TV shows where they would put her on with a parent whose child had been kidnapped and murdered, as if it was equally likely that your child would ride the subway safely and that he would be killed.

她被邀请出现在电视节目中，他们会把她和一位孩子被绑架和谋杀的父母放在一起，就好像你的孩子安全乘坐地铁和被杀的可能性是一样的。

Every host would ask her a variant of: ‘But Lenore, how would you have felt if he never came home?’

每个主持人都会问她一个不同的问题：“但是莱诺尔，如果他从未回家，你会有什么感觉？”

‘I was always flabbergasted,’ Lenore told me when we sat together in her home in Jackson Heights in New York. She told them that she was simply giving her son what she – and all the adults condemning her – had taken for granted when they were kids, just a few decades before.

“我总是大吃一惊，”当我们一起坐在莱诺尔位于纽约杰克逊高地的家中时，她告诉我。她告诉他们，她只是给了她儿子她——以及所有谴责她的成年人——在他们还是孩子的时候，也就是几十年前，认为理所当然的东西。

She tried to explain to people that we live in one of the safest moments in human history. Violence against adults and children has dramatically plunged, and your children are now three times more likely to be struck by lightning than to be killed by a stranger.

她试图向人们解释，我们生活在人类历史上最安全的时刻之一。针对成人和儿童的暴力行为急剧下降，您的孩子被闪电击中的可能性是被陌生人杀死的可能性的三倍。

She asked: Would you imprison your child to prevent them being hit by lightning? Statistically, that would make more sense. People responded with disgust to this argument. Other mothers told her that every time they turned their heads, they pictured their kids being snatched.

她问：你会囚禁你的孩子，以免他们被闪电击中吗？从统计上看，这更有意义。人们对这种说法表示厌恶。其他母亲告诉她，每次她们转过头，就会想象自己的孩子被抢走。

After hearing this a lot, Lenore realised, ‘That was my crime. My crime was not thinking that way. I hadn’t gone to the darkest place first and decided – oh my God, it’s not worth it.

听了很多次之后，丽诺尔意识到，‘那是我的罪过。我的罪行并不是这样想的。我没有先去最黑暗的地方，然后决定——天哪，这不值得。

To be a good American mom is to think that way now.’ She realised that somehow, we had – in a very short period of time – ended up believing only ‘a bad mom takes her eyes off her kids’.

现在要做一个好的美国妈妈就应该这样想。”她意识到，不知何故，我们在很短的时间内最终只相信“坏妈妈会把目光从孩子身上移开”。

She noticed that when a DVD of the early episodes of *Sesame Street* from the late 1960s was released, they had put a warning on the screen at the start. Five-year-olds are shown walking the streets on their own, talking to strangers and playing on vacant lots.

她注意到，当 20 世纪 60 年代末《芝麻街》前几集的 DVD 发行时，他们在开始时在屏幕上放了一条警告。画面中，五岁的孩子独自走在街上，与陌生人交谈，并在空地上玩耍。

The warning says: ‘The following is intended for adult viewing only and may not be suitable for our youngest viewers.’ She realised the change was so dramatic that now it was as if kids couldn’t even be allowed to see what freedom might look like.

警告说：“以下内容仅供成人观看，可能不适合我们最年轻的观众。”她意识到这种变化如此巨大，以至于现在好像甚至不允许孩子们看到自由的样子喜欢。

Lenore was puzzled by how quickly this ‘gigantic shift’ had happened. Children’s lives have come to be dominated by ideas ‘that are very radical and new. The idea that kids can’t play outside without this being dangerous – that has never been the case in human history.

莱诺尔对这种“巨大转变”发生得如此之快感到困惑。儿童的生活已经被“非常激进和新颖的想法”所主导。孩子们不能在户外玩耍而不危险——这在人类历史上从来没有出现过。

Kids have always played together, much of the time without direct adult supervision ... That’s been the way for all of humanity.

孩子们总是在一起玩耍，大部分时间都没有成人的直接监督……这就是全人类的方式。

To suddenly say no, it’s too dangerous – it’s like saying kids should

sleep upside down.’ It’s an inversion of what every previous human society has thought.

突然说“不”，这太危险了——就像说孩子们应该倒立睡觉一样。这与以前的人类社会的想法是相反的。



As I spent a lot of time with Lenore, I came to believe that to understand the effects of this change, we need to break it down into five different components and look at the scientific evidence behind each one. The first is the most obvious.

由于我与 Lenore 相处了很长时间，我开始相信，要了解这一变化的影响，我们需要将其分解为五个不同的组成部分，并研究每个组成部分背后的科学证据。第一个是最明显的。

For years, scientists have been discovering a broad body of evidence showing that when people run around – or engage in any form of exercise – their ability to pay attention improves. For example, one study that investigated this found that exercise provides ‘an exceptional boost’ to attention in children. Professor Joel Nigg, who I interviewed in Portland, has summarised the evidence clearly – he explains that ‘for developing children, aerobic exercise expands the growth of brain connections, the frontal cortex, and the brain chemicals that support self-regulation and executive functioning’.

多年来，科学家们发现了大量证据表明，当人们四处奔跑或进行任何形式的锻炼时，他们的注意力会得到提高。例如，一项对此进行调查的研究发现，运动可以“极大地提高”儿童的注意力。我在波特兰采访的乔尔·尼格教授清楚地总结了这些证据——他解释说，“对于发育中的儿童来说，有氧运动可以扩大大脑连接、额叶皮层以及支持自我调节和执行功能的大脑化学物质的生长”。

Exercise causes changes that ‘make the brain grow more and get more efficient’. The evidence showing this is so broad that these findings should be regarded, he writes, as ‘definite’.

锻炼会引起变化，“让大脑发育得更好，效率更高”。他写道，表明这一点的证据是如此广泛，以至于这些发现应该被视为“确定的”。

The evidence couldn't be clearer: if you stop kids from acting on their natural desire to run around, on average, their attention, and the overall health of their brains, will suffer.

证据再清楚不过了：如果你阻止孩子们按照他们奔跑的本能欲望行事，平均而言，他们的注意力和大脑的整体健康都会受到影响。



But Lenore suspected there might be a way this is harming kids that is even deeper. She started to seek out the leading scientists who have studied these questions – including professor of psychology Peter Gray, evolutionary primatologist Dr Isabel Behncke and social psychologist Professor Jonathan Haidt. They taught her that in fact it is when children play that they learn their most important skills – the ones they need for their whole lives.

但莱诺尔怀疑这可能会以某种方式对孩子造成更深的伤害。她开始寻找研究这些问题的顶尖科学家，包括心理学教授彼得·格雷、进化灵长类动物学家伊莎贝尔·本克博士和社会心理学家乔纳森·海特教授。他们告诉她，事实上，孩子们在玩耍时才能学到最重要的技能——他们一生都需要的技能。

To understand this second component of the change that has taken place – the deprivation of play – picture again that scene on Lenore's street when she was a child back in that Chicago suburb, or the scene I saw in Colombia.

为了理解已经发生的变化的第二个组成部分——玩耍的剥夺——再次想象一下莱诺尔小时候在芝加哥郊区的街道上的场景，或者我在哥伦比亚看到的场景。

What skills are the kids learning there, as they play freely with each other? For starters, if you're a kid and you're on your own with other kids, 'You figure out how to make something happen,' Lenore says. You have to use your creativity to come up with a game.

孩子们在互相自由玩耍的过程中正在学习哪些技能？首先，如果你是个孩子，并且独自和其他孩子在一起，“你会想出如何让事情发生，”莱诺尔说。你必须发挥你的创造力来设计一款游戏。

You then have to persuade the other kids that your game is the best one they could play. Then ‘you figure out how to read people enough so that the game keeps going’.

然后你必须说服其他孩子你的游戏是他们能玩的最好的游戏。然后“你会想出如何充分读懂人们的信息，以便游戏能够继续下去”。

You have to learn how to negotiate when it’s your turn and when it’s their turn – so you have to learn about other people’s needs and desires, and how to meet them. You learn how to cope with being disappointed, or frustrated.

你必须学会如何在轮到你和别人的时候进行谈判——所以你必须了解其他人的需求和愿望，以及如何满足他们。您将学习如何应对失望或沮丧。

You learn all this ‘through being excluded, through coming up with a new game, through getting lost, through climbing the tree and [then] somebody says, “Climb higher!” and you can’t decide if you will or you won’t.

你通过被排斥、通过想出一个新游戏、通过迷路、通过爬树，然后有人说，“爬得更高！”来学习这一切。你无法决定是否愿意。

Then you do, and it’s exhilarating, and then you climb a little higher the next time – or you climb a little higher and it’s so scary that you’re crying ... And yet: now you’re on top. These are all crucial forms of attention.’

然后你就这么做了，这是令人兴奋的，然后你下次爬得更高一点——或者你爬得更高一点，它太可怕了，你哭了……然而：现在你已经站在了顶端。这些都是重要的注意力形式。

One of Lenore’s intellectual mentors, Dr Isabel Behncke, the Chilean expert on play, told me when we sat together in Scotland that the scientific evidence we have so far suggests ‘there are three main areas [of child development] where play has a major impact.

莱诺尔的一位智力导师、智利游戏专家伊莎贝尔·贝内克 (Isabel Behncke) 博士在我们在苏格兰坐在一起时告诉我，迄今为止我们掌握的科学证据表明，“游戏在[儿童发展]的三个主要领域具有重大影响”。

One is creativity and imagination' – it's how you learn to think about problems and solve them. The second is 'social bonds' – it's how you learn to interact with other people and socialise. And the third is 'aliveness' – it's how you learn to experience joy and pleasure. The things we learn from play aren't trivial add-ons to becoming a functioning human being, Isabel explained.

一是创造力和想象力”——这是你学会思考问题和解决问题的方式。第二个是“社会纽带”——它是你学习与他人互动和社交的方式。第三个是“活力”——这是你学习体验快乐和快乐的方式。伊莎贝尔解释说，我们从游戏中学到的东西对于成为一个正常的人类来说并不是微不足道的附加内容。

They are the core of it. Play builds the foundation of a solid personality, and everything that adults sit down and explain to the child afterwards builds on this base. If you want to be a person who can pay attention fully, she told me, you need this base of free play.

他们是它的核心。游戏为坚实的人格奠定了基础，之后成人坐下来向孩子解释的一切都是建立在这个基础上的。她告诉我，如果你想成为一个能够全神贯注的人，你就需要这个自由发挥的基础。

Yet suddenly, we have been 'taking all this out of kids' lives,' Lenore says. Today, even when children do finally get to play, it's mainly supervised by adults, who set the rules and tell them what to do.

然而突然之间，我们已经“把这一切从孩子们的生活中夺走了，”莱诺尔说。如今，即使孩子们最终能够玩耍，也主要由成年人监督，他们制定规则并告诉他们该做什么。

On Lenore's street when she was a kid, everyone played softball and policed the rules themselves. Today, they go to organised activities where the adults intervene all the time to tell them what the rules are.

当莱诺尔还是个孩子的时候，她所在的街道上每个人都打垒球并自己遵守规则。如今，他们参加有组织的活动，大人一直介入并告诉他们规则是什么。

Free play has been turned into supervised play, and so – like processed food – it has been drained of most of its value. This means that now,

as a kid, Lenore said, ‘you’re not getting that [chance to develop these skills] – because you’re in a car being driven to a game where somebody tells you what position you’re playing, and when to catch the ball, and when it’s your time to hit, and who’s bringing the snack, and you can’t bring grapes because they have to be cut into quarters and it’s your mom’s job to do that... That’s a very different childhood, because you haven’t experienced the give-and-take of life that’s going to prepare you for adulthood.’ As a result, kids are ‘not having the problems and the exhilaration of getting there on their own.’ One day, Barbara Sarnecka, an associate professor of cognitive sciences at the University of California, Irvine, told Lenore that today ‘adults are saying: “Here’s the environment. I’ve already mapped it. Stop exploring.” But that’s the opposite of what childhood is.’

自由游戏已经变成了受监督的游戏，因此，就像加工食品一样，它的大部分价值已经被耗尽。莱诺尔说，这意味着现在，作为一个孩子，“你没有机会发展这些技能”——因为你坐在一辆汽车里，开着车去看一场比赛，有人告诉你你在打什么位置，什么时候接球，什么时候击球，谁带零食，你不能带葡萄，因为葡萄必须切成四等份，而这是你妈妈的工作……那是一个非常不同的童年”，因为你还没有经历过生活中的付出和索取，而这将为你为成年做好准备。”因此，孩子们“没有遇到问题，也没有通过自己的努力达到目标的兴奋感。”有一天，芭芭拉加州大学欧文分校认知科学副教授萨内卡（Sarnecka）告诉 Lenore，如今“成年人说：”这就是环境。我已经映射了它。别再探索了。”但这与童年相反。”

Lenore wanted to know: now that they are effectively under house arrest, what are kids doing with the time they used to spend playing?

莱诺尔想知道：既然孩子们实际上被软禁了，他们过去玩耍的时间都在做什么？

One study of this found that this time is now overwhelmingly spent on homework (which exploded by 145 percent between 1981 and 1997), screens, and shopping with their parents.

一项研究发现，现在绝大多数人的时间都花在了家庭作业（1981 年至 1997 年间激增了 145%）、屏幕和与父母一起购物上。

A 2004 study found that US kids spent 7.5 hours more each week on academics than they had twenty years before.

2004 年的一项研究发现，美国孩子每周花在学业上的时间比 20 年前

多了 7.5 小时。

Isabel told me the schools squeezing out play are ‘making a huge mistake’. She said: ‘I would first ask them – what is their objective? What are you trying to achieve?’ Presumably, they want children to learn.

伊莎贝尔告诉我，学校禁止学生玩耍是“犯了一个巨大的错误”。她说：“我首先会问他们——他们的目标是什么？你想实现什么目标？”想必，他们希望孩子们能够学习。

‘I just can’t see where these people get their insights from, because all the evidence shows it’s the other way round: our brains are more supple, more plastic, more creative’ when we have had the chance to ‘learn through play. The *primary* technology for learning is play. You learn to learn in play. And in a world where information is always changing, why do you want to fill their heads with information? We have no idea what the world will be in twenty years.

“我只是不明白这些人的见解是从哪里来的，因为所有的证据都表明事实恰恰相反：当我们有机会‘通过游戏来学习’时，我们的大脑会变得更加灵活、更具可塑性、更具创造力”。学习的主要技术是游戏。你学会在玩耍中学习。在一个信息不断变化的世界里，为什么要让他们的头脑充满信息呢？我们不知道二十年后的世界会是什么样子。

Surely we want to be creating brains that are adaptable, and have the capacity to assess context, and can be thinking critically. All these things are trained through play. So it’s so misguided, it’s unbelievable.’

当然，我们希望创造出适应性强、有能力评估环境、能够进行批判性思考的大脑。所有这些都是通过游戏来训练的。所以这是非常误导的，令人难以置信。”



This led Lenore to explore the third component of this change. Professor Jonathan Haidt – a leading social psychologist – has argued that there has been a big rise in anxiety among children and teens, in part because of this play deprivation. When a child plays, he learns the skills that make it possible to cope with the unexpected.

这促使 Lenore 探索这一变化的第三个组成部分。著名社会心理学家乔纳森·海特教授认为，儿童和青少年的焦虑感大幅上升，部分原因是玩耍的剥夺。当孩子玩耍时，他会学到应对意外情况的技能。

If you deprive children of those challenges, as they grow up they will feel panicked and unable to cope a lot of the time. They don't feel they are competent, or can make things happen without older people guiding them.

如果你剥夺孩子们面对这些挑战的机会，随着他们的成长，他们很多时候会感到惊慌，无法应对。他们觉得自己没有能力，或者没有长辈的指导就无法让事情发生。

Haidt argues this is one reason why anxiety is sky-rocketing – and there is strong scientific evidence that if you are anxious, your attention will suffer.

海特认为，这是焦虑激增的原因之一——而且有强有力的科学证据表明，如果你焦虑，你的注意力就会受到影响。



Lenore believes there is also a fourth factor at work. To understand it, you have to grasp a discovery that was made by the scientist Ed Deci, a professor of psychology who I interviewed in Rochester in upstate New York, and his colleague Richard Ryan, who I also spoke with. Their research uncovered that all human beings have within us two different kinds of motivation for why we do anything. Imagine you are a runner. If you go running in the morning because you love how it feels – the wind in your hair, the sense that your body is powerful and it's carrying you forward – that's an 'intrinsic' motive.

莱诺尔认为还有第四个因素在起作用。要理解它，你必须掌握科学家埃德·德西（Ed Deci）和他的同事理查德·瑞安（Richard Ryan）的一项发现。埃德·德西是我在纽约州北部罗彻斯特采访过的一位心理学教授，我也采访过他的同事理查德·瑞安。他们的研究发现，所有人对于我们做任何事情的动机都有两种不同的动机。想象你是一名跑步者。如果你早上跑步是因为你喜欢它的感觉——风吹过你的头发，你的身体充满力量，它带着你前进——这就是一个“内在”动机。

You're not doing it to get some other reward further down the line;

you're doing it because you love it. Now imagine you go running not because you love it, but because you have a drill-sergeant dad who forces you to get up and run with him.

你这样做并不是为了进一步获得其他奖励；而是为了获得更多的奖励。你这样做是因为你喜欢它。现在想象一下，你去跑步不是因为你喜欢它，而是因为你有一个教官爸爸，他强迫你站起来和他一起跑步。

Or imagine you go running in order to post the videos of you shirtless on Instagram and you're hooked on getting the hearts and 'yum, you're so hot' comments you receive. That would be an 'extrinsic' motive to run.

或者想象一下，你去跑步是为了在 Instagram 上发布你赤裸上身的视频，你沉迷于获得红心和收到的“嗯，你太性感了”的评论。这将是跑步的“外在”动机。

You're not doing it because the act itself gives you a sense of pleasure or fulfilment – you are doing it because you have been forced to, or to get something out of it further down the line.

你这样做并不是因为这个行为本身给了你一种快乐或满足感——你这样做是因为你被迫这样做，或者是为了进一步从中得到一些东西。

Richard and Ed discovered that it's easier to focus on something, and stick at it, if your motives are intrinsic – if you are doing something because it's meaningful to you – than if your motives are extrinsic, and you're doing it because you are forced to, or to get something out of it afterwards. The more intrinsic your motivation, the easier it will be to sustain your attention.

理查德和埃德发现，如果你的动机是内在的——如果你做某事是因为它对你有意义——那么你会更容易专注于某件事并坚持下去，而不是如果你的动机是外在的，而你这样做是因为你被迫，或者事后从中得到一些东西。你的动机越内在，就越容易保持你的注意力。

Lenore came to suspect that children in this new and radically different model of childhood are being deprived of the chance to develop intrinsic motives. Most people, she said, 'learn focus by doing something that is either very important or very interesting to them'.

莱诺尔开始怀疑，在这种全新的、截然不同的童年模式中，孩子们被剥夺了发展内在动机的机会。她说，大多数人“通过做一些对他们来说非

常重要或非常有趣的事情来学习专注”。

You ‘learn the habit of focus by being interested in something enough that you notice what’s going on, and you process it ... The way you learn to focus is automatic if there’s something that interests you ... or absorbs you, or thrills you.’ But if you are a kid today, you live almost all of your life according to what adults tell you to do.

你“通过对某件事足够感兴趣，注意到正在发生的事情，然后处理它来学习专注的习惯……如果有某件事让你感兴趣……或者让你着迷，或者让你兴奋，那么你学习专注的方式是自动的。”但是如果你今天还是个孩子，你几乎一生都会按照大人告诉你的去做。

She asked me: ‘How do you find meaning when your day is filled from seven in the morning to nine at night when you go to bed, with somebody else’s idea of what is important?’

她问我：“当你的一天从早上七点到晚上九点睡觉，并且别人对什么是重要的想法充满时，你如何找到意义？”

... If you don’t have any free time to figure out what [emotionally] turns you on, I’m not sure you’re going to find meaning. You’re not given any *time* to find meaning.’

……如果你没有任何空闲时间来弄清楚什么[情感上]让你兴奋，我不确定你是否会找到意义。你没有时间去寻找意义。”

As a child, wandering around her neighbourhood, Lenore had the freedom to figure out what excited her – reading, writing, playing dress-up – and to pursue these things when she wanted to. Other kids learned they loved soccer, or climbing, or little scientific experiments.

当还是个孩子的时候，莱诺尔在她的社区里闲逛，她可以自由地弄清楚什么让她兴奋——阅读、写作、玩装扮——并在她想要的时候去追求这些事情。其他孩子发现他们喜欢足球、攀岩或小科学实验。

That was at least one way they learned attention and focus. That route is largely being cut off for kids now. She asked me: if your attention is constantly managed by other people, how can it develop? How do you learn what fascinates you?

这至少是他们学习注意力和专注力的一种方式。现在这条路线对于孩子们来说基本上被切断了。她问我：如果你的注意力不断被别人管理，它怎么能发展呢？你如何学习让你着迷的东西？

How do you find your intrinsic motives, the ones that are so important to developing attention?

您如何找到对培养注意力如此重要的内在动机？



After learning all this, Lenore was so worried about what we are doing to our kids that she started to tour the country, urging parents to let their children play in a free, unstructured, unsupervised way some of the time. She set up a group named Let Grow, designed to promote free play and freedom to explore for kids.

了解这一切后，莱诺非常担心我们对孩子所做的事情，因此她开始周游全国，敦促父母有时让孩子以自由、无组织、无人监督的方式玩耍。她成立了一个名为“Let Grow”的团体，旨在促进孩子们自由玩耍和自由探索。

She would say to the parents: ‘I want everybody to think back to your own childhood’ and to describe ‘something that you loved – absolutely loved – to do, that you don’t let your own children do’. Their eyes would light up with memories. They would tell her: ‘ “We built forts. We played manhunt.” I met a guy the other day who played marbles. I said, “What was your favourite marble?” He said, “Oh, it was burgundy, and it was a swirl.” You could just see this love of something from so long ago.

她会对父母说：“我希望每个人都回想一下自己的童年”，并描述“一些你喜欢——绝对喜欢——做的事情，但你不让自己的孩子做”。他们的眼睛会因为回忆而闪闪发光。他们会告诉她：‘我们建造了堡垒。我们玩的是追捕游戏。’前几天我遇到一个玩弹珠的人。我说：“你最喜欢什么大理石？”他说：“哦，那是酒红色，而且是一个漩涡。”你可以看到这种对很久以前的东西的热爱。

It infused him with joy.’ The parents admitted that ‘they all rode their bikes. They all climbed trees. They all went to town and got candy.’ But then they said it was much too dangerous today to allow their

kids to do the same.

这让他充满了快乐。”父母承认，“他们都骑自行车。他们都爬树了。他们都进城去买糖果。”但他们又说，今天让他们的孩子做同样的事情太危险了。

Lenore would explain how absolutely minuscule the risk of kidnapping is – and that violence is lower now than when they were young. This is not, she added, *because* we hide our kids away – we know that because violence against adults has also massively fallen, and they still move around freely. Parents would nod, and keep their kids indoors nonetheless. She would explain the clear benefits of free play.

莱诺尔会解释绑架的风险是多么微乎其微——而且现在的暴力事件比他们年轻时要少。她补充说，这并不是因为我们把孩子藏了起来——我们知道这一点，因为针对成年人的暴力行为也大幅减少，而且他们仍然可以自由活动。父母会点头，但还是把孩子留在室内。她会解释自由玩耍的明显好处。

Parents would nod, and still they wouldn't let their kids out. Nothing seemed to work. She became more and more frustrated. She began to conclude that 'even the people who are on our side, or who wonder what happened ... they can't let go'.

家长们虽然点头，但还是不让孩子出去。似乎什么都不起作用。她变得越来越沮丧。她开始得出结论，“即使是那些站在我们这边的人，或者想知道发生了什么的人……他们也不能放手”。

She realised 'you can't be the only people [doing it] – because then you're the crazy person sending your kid' out alone.

她意识到“你不可能是唯一[这样做]的人——因为那样你就是那个独自送你的孩子出去的疯子”。

So she asked herself: what if we did this differently? What if we stopped trying to change parents' minds, and started trying to change their behaviour instead – and what if we tried to change them not as isolated individuals, but as a group?

所以她问自己：如果我们采取不同的做法会怎样？如果我们不再试图改变父母的想法，而是开始尝试改变他们的行为，结果会怎样？如果我们不是试图改变他们作为一个孤立的个体，而是作为一个群体，又会怎

样呢？

With those thoughts, Lenore became a part of a crucial experiment.

带着这些想法，莱诺尔成为了一项重要实验的一部分。



One day, Roanoke Avenue Elementary, a school on Long Island, decided to take part in something called Global Play Day, where for one day a year, kids are allowed to play freely and create their own fun.

有一天，长岛的一所学校罗阿诺克大道小学决定参加一个名为“全球游戏日”的活动，每年有一天，孩子们可以自由玩耍并创造自己的乐趣。

The teachers filled four of their classrooms with empty boxes and Lego and some old toys, and they said, Go play. You get to choose what you do. Donna Verbeck, who had been a teacher at the school for more than twenty years, watched the kids, expecting to see glee and laughter – but she quickly realised something was wrong. Some of the kids plunged in and started playing right away, as she'd expected – but a large number of the children just stood there.

老师们在四个教室里放满了空盒子、乐高积木和一些旧玩具，他们说，去玩吧。你可以选择你做什么。唐娜·维贝克（Donna Verbeck）在这所学校当了二十多年的老师，她看着孩子们，期待看到欢乐和笑声，但她很快意识到出了问题。正如她所料，一些孩子立即投入其中并开始玩耍，但许多孩子只是站在那里。

They stared at the boxes and the Lego and the handful of children who were starting to improvise games, but they didn't move. They watched, inert, for a long time. Finally one of the kids, puzzled by the experience and unsure what to do, lay down in a corner and went to sleep.

他们盯着盒子、乐高积木和几个开始即兴制作游戏的孩子，但他们没有动。他们一动不动地注视了很长时间。最后，其中一个孩子对这次经历感到困惑，不知道该怎么办，躺在角落里睡着了。

Suddenly, Donna realised, as she explained to me later: 'They don't know what to do. They don't know how to get involved when

somebody else is playing, or how to just start free play by themselves.

突然，唐娜意识到，正如她后来向我解释的那样：“他们不知道该怎么做。”他们不知道如何在其他人玩耍时参与其中，也不知道如何自己开始自由玩耍。

They just did not know how to do it.’ Thomas Payton, who was the principal, added: ‘And we’re not talking one or two kids. There were a lot of kids like that.’ Donna felt shaken, and sad. She realised that these kids had never been set free to play before. Their attention had been constantly managed for them by adults for their whole lives.

他们只是不知道该怎么办。”校长托马斯·佩顿补充道：“我们说的不是一两个孩子。这样的孩子有很多。”唐娜感到震惊和悲伤。她意识到这些孩子以前从未被自由地玩耍过。他们的注意力一生都由成年人不断地管理。

So Roanoake Avenue Elementary decided to become one of the first schools to sign up to the programme that Lenore leads. Let Grow is based on the idea that if children are going to become adults who can make their own decisions and pay attention, they need to experience increasing levels of freedom and independence throughout their childhood.

因此，罗阿诺克大道小学决定成为首批签署 Lenore 领导的项目的学校之一。Let Grow 的理念是，如果孩子们想要成为能够自己做决定并能集中注意力的成年人，他们需要在整个童年时期体验到越来越多的自由和独立。

When a school signs up, they commit that one day a week, or once a month, a child’s ‘homework’ will be to go home and do something new, independently, without adult supervision, and then report back on it. They would choose their own mission.

当学校签约时，他们承诺每周有一天或每月一次，孩子的“家庭作业”将是回家并在没有成人监督的情况下独立做一些新的事情，然后报告。他们会选择自己的使命。

Every child, when they go out into the world, is given a card to show to any adult who stops them to ask where their parents are. It says: ‘I’m not lost or neglected. If you think it’s wrong for me to be on my

own, please read *Huckleberry Finn* and visit letgrow.org. Remember your own childhood. Was your parent with you every second? And with today's crime rate back to what it was in 1963, it is safer to play outside now than when you were at my age. Let me grow.'

每个孩子，当他们走向世界时，都会得到一张卡片，如果任何成年人拦住他们询问他们的父母在哪里，可以向他们出示。它说：‘我没有迷失或被忽视。如果您认为我独自一人是错误的，请阅读《哈克贝利·费恩历险记》并访问 letgrow.org。记住你自己的童年。你的父母每时每刻都在你身边吗？随着今天的犯罪率回到 1963 年的水平，现在出去玩比我这个年纪的时候更安全。让我成长。

I went to meet the kids who had been taking part in this programme at Roanoke for over a year. It's in a poor neighbourhood with a lot of parents who are financially struggling, and many who are recent immigrants. The first group I met were nine years old, and they jostled to tell me about what they had done as part of their project with a gleeful energy. One of them set up a lemonade stand on his street.

我去见了在罗阿诺克参加这个项目一年多的孩子们。它位于一个贫困社区，有很多经济困难的父母，其中许多是新移民。我遇到的第一批孩子是九岁的孩子，他们兴高采烈地争先恐后地告诉我他们在项目中所做的事情。其中一个人在他家的街道上摆了一个柠檬水摊。

Another had walked down to the local river and collected the trash that had built up there, because she said this would 'save the turtles'. (A few of the other kids joined in when she said this and shouted, 'Save the turtles!

另一个人走到当地的河边，收集那里堆积的垃圾，因为她说这会“拯救海龟”。（当她说这句话时，其他一些孩子也加入了进来，并喊道：“救救海龟！”

Save them!') A little girl told me that, before this project: 'Well, I'd literally sit in front of a TV all day. It doesn't really pop into your head to do stuff.' But for Let Grow, the first thing she did was cook something for her mother on her own.

救救他们！') 在这个项目之前，一个小女孩告诉我：‘好吧，我真的会整天坐在电视机前。你的脑子里并不会真正想到要做的事情。’但对于 Let Grow 来说，她做的第一件事就是自己给妈妈做点东西。

She waved her hands excitedly as she described it. It seemed to have blown her mind – to discover that she could *do* something.

她兴奋地挥舞着双手，描述着这一切。发现自己可以做点什么，这似乎让她大吃一惊。

I also wanted with talk to the kids who didn't immediately volunteer their stories, so I spoke with a pale, rather serious-faced boy.

我还想和那些没有立即自愿讲述故事的孩子们交谈，所以我和一个脸色苍白、表情相当严肃的男孩交谈。

He told me quietly: 'We have a rope [in our backyard] that's connected to a tree.' It had never crossed his mind to try to climb it, 'But I finally said – well, I could at least try to do it.' He managed to get a little way up.

他平静地告诉我：“我们（后院）有一根绳子，与一棵树相连。”他从来没有想过要尝试攀爬它，“但我最后说 - 好吧，我至少可以尝试这样做……”他设法站了起来。

He offered a sly little beam of a smile as he described how it felt to be climbing for the first time.

当他描述第一次攀登的感觉时，他露出了狡猾的微笑。

Some of the kids discovered new ambitions. In Donna's class, there was a boy I'll call L.B., who wasn't particularly academic, and had often been distracted or bored in lessons. There was a constant struggle between him and his mom to get him to read or do his homework.

一些孩子发现了新的抱负。在唐娜的班上，有一个男孩，我称之为L.B.，他的学术成绩并不特别好，并且经常在课堂上分心或感到无聊。他和妈妈之间一直在努力让他读书或做作业。

He chose as his Let Grow project to build a replica of a boat. He assembled a piece of wood, a foam core, a hot-glue gun, and toothpicks and thread, and he sat night after night, intensely working on it.

他选择建造一艘船的复制品作为他的“Let Grow”项目。他组装了一块木头、一个泡沫芯、一把热胶枪、牙签和线，一夜又一夜地坐着，紧张地工作。

He tried one set of techniques, and the boat fell apart – so he tried again, and again. Once he had successfully built this small boat and showed it to his friends, he decided he was going to build something bigger – a life-size wagon that he could sleep in, in his yard.

他尝试了一套技术，但船解体了——所以他一次又一次地尝试。当他成功建造了这艘小船并将其展示给他的朋友们后，他决定建造一些更大的东西——一辆真人大小的马车，他可以在他的院子里睡觉。

He took an old door that was in his garage, and his dad's wrenches and screwdrivers, and he started to read about how to put all this together. He persuaded his neighbours to give him some old bamboo they had lying around in their garden, to use for the frame. Before long, L.B.

他拿起车库里的一扇旧门，还有他父亲的扳手和螺丝刀，他开始阅读有关如何将所有这些组合在一起的文章。他说服邻居给他一些花园里的旧竹子，用来做框架。不久之后，L.B.

had a wagon.

有一辆马车。

Then he decided he wanted to do something even more ambitious – to build an amphibious wagon, one he could push out onto the ocean. So he started to read about how to build things that float. When I talked with L.B., he described the process of building it in detail.

然后他决定要做一些更雄心勃勃的事情——建造一辆两栖马车，它可以把它推到海上。于是他开始阅读有关如何建造漂浮物的文章。当我与L.B. 交谈时，他详细描述了构建它的过程。

He told me he was going to build another wagon next: 'I have to figure out how I'm going to cut the hula hoops to go on it, and then I got to lay shrink-wrap over it.' I asked him how this project made him feel.

他告诉我他接下来要建造另一辆马车：“我必须弄清楚如何切割呼啦圈以放在上面，然后我必须在上面铺上保鲜膜。”我问他怎么做这个项目让他感受到了。

‘It’s different because I’m actually using my hands on materials ... I think it’s cool to just have your hands on something instead of seeing it on a screen, not really being able to touch it.’ I went to meet his mother, who worked in medical billing, and she told me: ‘I don’t think, as a parent, I realised how much he could do on his own.’ She saw him change: ‘I could see the confidence – and him wanting to do more and more and figure it out his way.’ She glowed with pride.

“这是不同的，因为我实际上是用我的手在材料上.....我认为用手放在某个东西上而不是在屏幕上看到它，而不是真正能够触摸它，这很酷。”我去见了他的母亲，她从事医疗账单工作，她告诉我：“作为一名家长，我不认为我意识到他可以自己做多少事情。”她看到他的变化：“我可以看到信心 - 并且他想做“越来越多，并以他的方式解决问题。”她自豪地容光焕发。

Her struggles to get him to read had ended, because now he was reading all the time about how to build stuff.

她让他读书的努力已经结束，因为现在他一直在阅读有关如何构建东西的内容。

It struck me: when L.B. was being told what to do constantly – when he was being forced to act on extrinsic motivations – he couldn’t focus, and he was bored all the time.

我突然想到：当 L.B.当他被迫根据外在动机采取行动时，他不断被告知要做什么，他无法集中注意力，而且一直感到无聊。

But when he was given the chance, through play, to find out what interested him – to develop an intrinsic motivation – his ability to focus flourished, and he worked for hours and hours without a break, building his boats and wagons.

但是，当他有机会通过玩耍找出自己感兴趣的事情（发展内在动力）时，他的注意力集中能力就会蓬勃发展，他会不间断地工作几个小时，建造他的船只和马车。

His teacher, Donna, told me L.B. changed in class after that. His

reading hugely improved, and ‘he didn’t consider it to be “reading”, because it was his hobby.

他的老师唐娜告诉我 L.B.之后课堂上发生了变化。他的阅读能力有了很大的提高，“他不认为这是‘阅读’，因为这是他的爱好。”

It was something he really, really liked.’ He started to gain status among the other kids – whenever they wanted to build anything, the cry would go up to find L.B., because he knew how to do it. She told me that – as with all the deepest learning – ‘Nobody taught him.

这是他真的非常喜欢的东西。”他开始在其他孩子中获得地位——每当他们想要建造任何东西时，就会大声喊着去找 L.B.，因为他知道怎么做。她告诉我——就像所有最深层次的学习一样——“没有人教他。”

His mom and dad just let him do it... He just used his own head and really taught himself.’ Gary Karlson, another teacher there, told me: ‘That learning is going to do more for that kid than anything academic that we could’ve brought to him through his time here.’

他的妈妈和爸爸只是让他这样做.....他只是用自己的头脑，真正自学。”那里的另一位老师加里·卡尔森告诉我：“对于那个孩子来说，学习比我们所能做的任何学术事情都更重要。”给他带来了他在这里的时光。

As I talked with L.B., I thought about another aspect of attention that I had been taught about by scientists – one that is, I think, the fifth way in which we are currently hobbling our children’s attention. In Aarhus in Denmark, Jan Tønnesvang, a Professor of Psychology there, had told me that we all need to have a sense of what he called ‘mastery’ – that we are good at something. It’s a basic human psychological need.

当我与 L.B. 交谈时，我想到了科学家们教给我的注意力的另一个方面——我认为，这是我们目前阻碍孩子注意力的第五种方式。在丹麦奥胡斯，那里的心理学教授简·托内斯万（Jan Tønnesvang）告诉我，我们都需要有一种他所说的“掌握”的感觉——我们擅长某件事。这是人类基本的心理需求。

When you feel you are good at something, you will find it much easier to focus on it, and if you feel incompetent, your attention will shrivel like a salted snail.

当你觉得自己擅长某件事时，你会发现更容易专注于它，而如果你觉得自己无能，你的注意力就会像咸蜗牛一样枯萎。

When I listened to L.B., I realised that we have a school system right now that is so narrow that it makes a lot of kids (especially boys, I think) feel that they aren't good at anything. Their experience of school is constantly being made to feel incompetent. But once L.B.

当我听 L.B. 的演讲时，我意识到我们现在的学校系统非常狭窄，以至于很多孩子（尤其是男孩，我认为）觉得自己什么都不擅长。他们的学校经历不断让他们感到自己无能。但有一次 L.B.

started to feel he could master something – that he could become *good* at it – his focus began to form.

开始觉得他可以掌握某件事——他可以擅长它——他的注意力开始形成。



I went to see another aspect of the programme, half an hour's drive away at a local middle school, in a wealthier part of Long Island. The teacher Jodi Maurici told me she realised her students needed a Let Grow program when thirty-nine out of her 200 students – aged between twelve and thirteen – were diagnosed with anxiety problems in a single year, way more than she'd ever had before.

我去了半小时车程外的长岛较富裕地区的一所当地中学，了解了该项目的另一个方面。老师 Jodi Maurici 告诉我，当她的 200 名学生中，有 39 名年龄在 12 岁到 13 岁之间的学生在一年内被诊断出患有焦虑问题，比她以前遇到的要多得多时，她意识到她的学生需要“让成长”计划。

Yet when Jodi explained that their thirteen-year-olds should do something – anything – independently, lots of parents became angry. 'I had one child tell me they wanted to do the laundry, and [her] mom said, "Absolutely not. You're not doing the laundry.'

然而，当乔迪解释说他们十三岁的孩子应该独立做某事——任何事——时，很多父母都生气了。“我有一个孩子告诉我他们想洗衣服，[她的]妈妈说：“绝对不想。你不洗衣服。

You may ruin it.” The child was so defeated at that point ... When I say defeated, I mean defeated.’ They told Jodi: ‘They don’t even trust me to try on my own.’ She said: ‘They get no confidence, because the small things build confidence.’

你可能会毁掉它。”孩子在那一刻非常失败……当我说失败时，我的意思是失败。”他们告诉乔迪：“他们甚至不相信我自己尝试。”她说：“他们没有信心，因为小事情建立信心。

When I talked with Jodi’s students, it was startling to hear how terrified they had been at the start of the programme. A tall, strapping fourteen-year-old boy told me he had always been too frightened of kidnapping and ‘all the ransom calls that happen’ to walk into town.

当我与乔迪的学生交谈时，我惊讶地发现他们在课程开始时是多么害怕。一个身材高大、魁梧的十四岁男孩告诉我，他一直非常害怕绑架和“发生的所有勒索电话”，不敢走进城里。

He lives in a place where the French bakery is across the street from the olive-oil store, but he had anxiety levels that would have been appropriate to living in a war zone. The Let Grow programme gave him a taste of independence in small steps. First he did his own laundry. Then, a month later, his parents let him go for a run around the block.

他住在法国面包店与橄榄油店街对面的地方，但他的焦虑程度适合生活在战区。“让成长”计划让他尝到了一点点独立的滋味。首先他自己洗衣服。一个月后，他的父母让他绕着街区跑步。

Within a year, he had teamed up with his friends and they had built a fort in their local woods, where they now spend a lot of their time hanging out. He told me: ‘We sit there and talk, or we have little competitions. We don’t have our moms. We can’t say, “Hey mom – can you get us this?”’ It doesn’t work like that.

一年之内，他与朋友们合作，在当地的树林里建造了一座堡垒，现在他们大部分时间都在那里闲逛。他告诉我：“我们坐在那里聊天，或者我们很少有比赛。我们没有妈妈。我们不能说：“嘿妈妈——你能给我们这个吗？”它不是那样工作的。

It's different.' As I spoke with him, I thought about something the writer Neale Donald Walsch wrote – 'life begins at the edge of your comfort zone'.

这是不同的。”当我和他交谈时，我想到了作家尼尔·唐纳德·沃尔什（Neale Donald Walsch）写的一句话——“生活始于你的舒适区边缘”。

Lenore met this boy with me, and afterwards she said: 'Think of history, and prehuman history. We have to chase things to eat. We have to hide from things that want to eat us, and [we have to] seek. We need to build shelter.

莱诺尔和我一起见到了这个男孩，后来她说：“想想历史，想想前人类的历史。”我们必须去追逐吃的东西。我们必须躲避那些想要吃掉我们的东西，并且[我们必须]寻找。我们需要建造庇护所。

Everybody does that for a million years, and just this generation, we've taken it all away. Kids don't get to build their shelter, or hide, or seek with a bunch of other kids on their own ... And that boy, given the chance, went into the woods and built a shelter.'

一百万年来，每个人都这样做，而就在这一代人，我们把这一切都拿走了。孩子们无法独自建造自己的庇护所，或者与一群其他孩子一起躲藏或寻找……而那个男孩，一旦有机会，就走进树林并建造了一个庇护所。



One day, after a year of growing, and building, and focusing, L.B. and his mom walked down to the ocean, and placed the amphibious wagon he had built onto the water. They pushed it out to sea. They watched it float for a moment – and then it sank. They went home.

有一天，经过一年的成长、建设和专注，L.B.他的妈妈走到海边，把他建造的两栖马车放在水面上。他们把它推到海里。他们看着它漂浮了一会儿——然后它就沉了下去。他们回家了。

'I felt disappointment, but I was kind of determined to get it afloat. So I siliconed it,' L.B. told me. They went back to the ocean. This time, the wagon floated, and L.B. and his mother watched it drift away. 'I felt kind of proud,' L.B. told me. 'I was happy to see it float.'

“我感到失望，但我下定决心要让它浮起来。所以我对它进行了硅处理，”L.B.告诉我。他们又回到了大海。这一次，马车漂浮起来，L.B.他

的母亲看着它渐渐远去。“我感到有点自豪，”L.B.告诉我。“我很高兴看到它漂浮起来。”

And then they went home, and he started to focus on the next thing he wants to build.

然后他们回家了，他开始专注于他想要建造的下一个东西。



At first, a lot of parents were very nervous about letting their kids take part in the Let Grow experiment. But, Lenore said, ‘When the kid comes through the door proud, and happy, and excited, and maybe a little sweaty or hungry, and they met a squirrel, or they ran into a friend, or they found a quarter,’ the parents see that ‘their kid rose to the occasion’. Once this happens, ‘They are so proud that the parents are rewired. The parents are like – “that’s my boy. Look at him.” That’s what changes them.

起初，很多家长对于让孩子参加 Let Grow 实验感到非常紧张。但是，莱诺尔说，“当孩子骄傲、快乐、兴奋地走进门时，也许有点出汗或饥饿，他们遇到了一只松鼠，或者遇到了朋友，或者发现了一枚硬币，”父母们看到“他们的孩子适应了这种情况”。一旦发生这种情况，‘他们会为父母的重新布线而感到自豪。父母就像——“那是我的儿子。看着他。”这就是改变他们的原因。

Not me telling them this is what is going to be good for your kid ... The only thing that actually changes the parents is seeing their own kids do something without them watching or helping ... People have to see it to believe it. See their kid blossom.

不是我告诉他们这对你的孩子有好处.....真正改变父母的唯一事情是看到自己的孩子在没有他们观看或帮助的情况下做一些事情.....人们必须亲眼所见才能相信。看到他们的孩子绽放。

And afterward they can’t understand why they didn’t trust their kids sooner. You have to change the picture in people’s heads.’

后来他们不明白为什么他们不早点相信自己的孩子。你必须改变人们头脑中的形象。



After everything I had learned from Lenore and the scientists she works with, I began to wonder if our kids are not only more confined at home, but also more confined at school.

在我从莱诺尔和与她一起工作的科学家那里学到了一切之后，我开始怀疑我们的孩子是否不仅在家里受到更多限制，而且在学校也受到更多限制。

I started to ask myself – is the way our schools are structured today helping our kids to develop a healthy sense of focus, or in fact hindering it?

我开始问自己——我们今天的学校结构是帮助我们的孩子培养健康的专注感，还是实际上阻碍了它？

I thought about my own education. When I was eleven years old, I was sitting at a wooden desk in a chilly classroom on my first day at secondary school, which is roughly equivalent to middle school in the US. A teacher placed pieces of paper in front of every kid in the class.

我想到了我自己的教育。当我十一岁的时候，我在一个寒冷的教室里坐在一张木桌前上中学，这大约相当于美国的中学。老师把纸片放在班上每个孩子面前。

I looked down and saw that on this piece of paper, there was a grid, full of little boxes. ‘This is your timetable,’ I remember him saying. ‘It says where you have to be, and at what time, every day.’ I looked at it. It said that on Wednesday at 9 a.m.

我低头一看，在这张纸上，有一个格子，上面全是小盒子。“这是你的时间表，”我记得他说。“上面写着你每天必须去哪里、什么时间。”我看着它。据称，周三上午 9 点

I would be learning woodwork; at 10 a.m. history; at 11 a.m. geography; and so on. I felt a flush of anger, and looked around me. I thought – wait, what’s happening here? Who are these people to tell me what I will be doing at 9 a.m. on a Wednesday morning?

我会学习木工；上午10点历史；上午11点地理；等等。我感到一阵愤怒，环顾四周。我想——等等，这里发生了什么？这些人是谁来告诉我周三早上 9 点要做什么？

I haven't committed any crime. Why am I being treated like a prisoner?

我没有犯任何罪。为什么我会被当作囚犯对待？

I put up my hand and asked the teacher why I had to do these lessons, and not, say, learn about things I found interesting. 'Because you have to,' he said. This didn't seem to me to be a satisfying answer, so I asked him what he meant. 'Because I say so,' he said, flustered.

我举起手问老师为什么我必须上这些课，而不是学习我觉得有趣的东西。“因为你必须这样做，”他说。我觉得这不是一个令人满意的答案，所以我问他是什么意思。“因为我就是这么说的，”他慌乱地说。

In every lesson after that, I asked why we were learning these things. The answers were always the same: because you'll have a test on it; because you have to; because I tell you so. After a week, I was told to 'shut up and learn'. When I was at home, choosing my own material, I could read for days on end. At school, I could barely read for five minutes. (This was before the notion of ADHD had spread to Britain, so I was not given stimulants, though I suspect that if I was at school today I would be.)

在那之后的每一节课中，我都会问我们为什么要学习这些东西。答案总是一样的：因为你要对其进行测试；因为你必须这样做；因为我告诉你了。一周后，我被告知要“闭嘴学习”。当我在家时，自己选择材料，可以连续阅读几天。在学校，我几乎读不了五分钟。（这是在多动症的概念传播到英国之前，所以我没有得到兴奋剂，尽管我怀疑如果我今天在学校，我就会服用兴奋剂。）

I always loved learning, and I always hated school. For a long time I thought this was a paradox, until I got to know Lenore.

我一直热爱学习，却一直讨厌上学。很长一段时间我都认为这是一个悖论，直到我认识了莱诺尔。

Because it consisted mostly of fragmented rote-learning, very little in my education was meaningful to me, and since I was at school twenty-five years ago, education has been stripped of meaning even more.

因为大部分都是零碎的死记硬背，所以我的教育对我来说意义不大，而且自从我二十五年前上学以来，教育就更加失去了意义。

Across most of the Western world, the school system has been radically restructured by politicians to prioritise testing children much more. Almost everything else has been steadily squeezed out – from play, to music, to breaks. There was never a golden age when most schools were progressive, but there has been a swing towards a school system built around a narrow vision of efficiency. In 2002 George W. Bush signed into law the No Child Left Behind Act, which massively increased standardised testing across the US. In the four years that followed, diagnoses of severe attention problems in children rose by 22 percent.

在西方世界的大部分地区，政客们对学校系统进行了彻底重组，以更加优先考虑对儿童进行测试。几乎其他一切都被稳步挤出——从游戏、音乐到休息。大多数学校从来都没有进步的黄金时代，但人们已经转向围绕狭隘的效率愿景建立的学校系统。2002年，乔治·W·布什（George W. Bush）签署了《不让一个孩子掉队法案》（No Child Left Behind Act），该法案大幅提高了美国各地的标准化考试水平。在接下来的四年里，儿童严重注意力问题的诊断增加了22%。

I thought back over all the factors that I had learned make it possible for kids to develop attention. Our schools allow kids less exercise. They allow kids less play. They create more anxiety, because of the frenzy of tests.

我回顾了我所学到的所有使孩子们能够培养注意力的因素。我们的学校允许孩子们进行较少的锻炼。他们让孩子们少玩。由于疯狂的测试，他们会产生更多的焦虑。

They don't create conditions where kids can find their intrinsic motivations. And for many kids, we don't give them opportunities to develop mastery – the sense they are good at something.

他们没有创造让孩子们找到内在动机的条件。对于许多孩子来说，我们没有给他们发展掌握的机会——让他们感觉自己擅长某件事。

All along, many teachers warned that dragging schools in this direction was a bad idea, but politicians tied financial support for schools to it nonetheless.

一直以来，许多老师都警告说，将学校拖向这个方向是一个坏主意，但政客们仍然将对学校的财政支持与此挂钩。

I wondered if there was a better way – so I decided to visit places that take a radically different approach to education, to see what I could learn from them. In the late 1960s, a group of Massachusetts parents who were unhappy with their kids' schooling decided to do something that sounds, at first glance, quite mad. They opened a school that would have no teachers, no classes, no curriculum, no homework and no tests. One of the founders told me their goal was to create a completely new model, from scratch, of how a school could be. It left out almost everything we think of as schooling.

我想知道是否有更好的方法，所以我决定参观那些采用截然不同的教育方式的地方，看看我能从他们身上学到什么。20 世纪 60 年代末，马萨诸塞州的一群父母对孩子的学业不满意，决定做一些乍一看相当疯狂的事情。他们开设了一所没有老师、没有班级、没有课程、没有家庭作业、没有考试的学校。一位创始人告诉我，他们的目标是从头开始创建一个全新的学校模式。它几乎遗漏了我们所认为的学校教育的一切。

More than fifty years later, I arrived at their creation. It is named Sudbury Valley School, and from the outside, it looks like a raddled Downton Abbey – a big, roomy, old-fashioned mansion, surrounded by woods and barns and creeks.

五十多年后，我完成了他们的创作。它的名字叫萨德伯里谷学校，从外面看，它就像一座破旧的唐顿庄园——一座宽敞、宽敞的老式宅邸，周围环绕着树林、谷仓和小溪。

It feels like you are stepping into a clearing in a forest, with the scent of pine trees filling every space you enter.

感觉就像走进森林中的空地，进入的每个空间都充满松树的香味。

An eighteen-year-old student named Hannah offered to show me around and explain how the school works. We stood at first by the piano room, with kids milling freely around us, and she explained that before she came here, she went to a standard American high school.

一位名叫汉娜 (Hannah) 的 18 岁学生提出带我参观并解释学校的运作方式。我们一开始站在琴房旁，孩子们在我们周围自由地走来走去，她解释说，在她来这里之前，她就读于一所标准的美国高中。

‘I just dreaded it. I didn’t want to get up. I was so anxious, and then I’d just go to school, and I’d get through it, and then I’d just get home as fast as I could,’ she said.

“我只是害怕它。我不想起来。我非常焦虑，然后我就去学校，我会完成学业，然后我会尽快回家，”她说。

‘It was really hard for me to have to sit still and learn stuff that I didn’t think was any good to me.’ So, she told me, when she arrived here, four years before I met her, ‘It was shocking.’ It was explained to her that there is no structure at Sudbury except for the one you create with your fellow students.

“对我来说，必须安静地坐着学习那些我认为对我没有任何好处的东西真的很难。”所以，当她到达这里时，也就是我遇见她的四年前，她告诉我，“这太令人震惊了”有人向她解释说，萨德伯里除了你和同学们共同创建的结构外，没有其他结构。

There’s no timetable or lessons. You learn what you want. You choose how to spend your time. You can ask the staff – who mill around and talk to the kids – to teach you things if you want, but there’s no pressure to do that.

没有时间表或课程。你学到你想要的东西。你选择如何度过你的时间。如果你愿意的话，你可以要求工作人员教你一些东西，他们会四处走动并与孩子们交谈，但这样做没有压力。

So, I asked, what do the kids do all day? From age four to eleven, the kids spend most of their time playing extraordinarily elaborate games they have created, which go on for months, and build up into an epic mythology, like a children’s version of *Game of Thrones*. They have clans and fight goblins and dragons, and in the school’s extensive grounds, they build forts.

于是，我问，孩子们整天都在做什么？从四岁到十一岁，孩子们大部分时间都在玩他们制作的极其精致的游戏，这些游戏会持续几个月，并逐渐形成一个史诗般的神话，就像儿童版的《权力的游戏》一样。他们有氏族，与妖精和龙作战，并在学校广阔的场地上建造堡垒。

Waving towards the rocks, Hannah says that through all these games, ‘I think they’re learning problem-solving, because they’re building

these forts, and then there could be a conflict within the group, and they have to figure that out.

汉娜向岩石挥手说道，通过所有这些游戏，“我认为他们正在学习解决问题，因为他们正在建造这些堡垒，然后团队内部可能会发生冲突，他们必须解决这个问题”。

They're learning how to be creative and think about things in a different way.'

他们正在学习如何发挥创造力并以不同的方式思考事物。

The older students tend to form groups and ask to learn things together – whether it's cooking, or pottery, or music. People go on learning jags, she says.

年长的学生倾向于组成小组，要求一起学习东西——无论是烹饪、陶艺还是音乐。她说，人们不断地学习jags。

'I'll find this topic that I'm really interested in, and I'll just latch onto it, and I'll research it or I'll read about it for a week or a few days, and then I move on to the next thing ... I'm really interested in medicine, so there's one speciality of medicine [where] I would read about it intensively and learn everything I could.

“我会找到我真正感兴趣的课题，然后抓住它，进行研究，或者花一周或几天的时间阅读它，然后继续前进接下来.....我对医学真的很感兴趣，所以有一个医学专业，我会深入阅读它并学习我能学到的一切。

Then I would go to lizards – lizards are my favourite animal, so I read a lot about lizards.

然后我会去看蜥蜴——蜥蜴是我最喜欢的动物，所以我读了很多关于蜥蜴的书。

Right now, there's a bunch of people who have been doing origami all day, which is really cool.' Hannah had been spending the past year teaching herself Hebrew, with the help of a staff member.

现在，有一群人整天都在做折纸，这真的很酷。”汉娜在过去的一年里一直在一名工作人员的帮助下自学希伯来语。

The fact that you have to create order for yourself doesn't mean there's no order at all, she told me as we walked through the grounds. On the contrary: all the school's rules are created and voted on by a daily meeting.

当我们走过场地时，她告诉我，你必须为自己创造秩序这一事实并不意味着根本没有秩序。相反：学校的所有规则都是由每日会议制定和投票决定的。

Anyone can turn up and make a proposal, and anyone can vote on it. Everyone – from a four-year-old to the adult staff – has the same say, a single vote. There's an elaborate legal code that the school has built up over the years.

任何人都可以提出提案，任何人都可以对其进行投票。每个人——从四岁的孩子到成年员工——都有同样的发言权，一票。学校多年来建立了一套详尽的法律法规。

If you are caught breaking the rules, you get tried by a jury that represents the whole age range of kids at the school, and they decide on the punishment. For example, if you break a tree branch, they might decree that you aren't allowed on the trees for a few weeks.

如果您被发现违反规则，您将受到代表学校所有年龄段孩子的陪审团的审判，并由他们决定惩罚。例如，如果您折断树枝，他们可能会规定您在几周内不得在树上活动。

The school is so democratic that the kids even vote on whether the individual staff members get rehired every year.

学校非常民主，孩子们甚至每年都会投票决定是否重新雇用个别教职员。

We walked through the dance room, the computer room, the walls covered with books. At this school, it became clear, kids only do things that are meaningful to them.

我们走过舞蹈室、电脑室，墙上挂满了书。在这所学校，很明显，孩子们只做对他们有意义的事情。

'I think if you're not getting to use your imagination and be creative,

then it's really putting you in a box,' Hannah told me.

汉娜告诉我，“我认为，如果你不能发挥你的想象力和创造力，那你就真的被困在了一个盒子里。”

'I don't feel as much pressure to learn every single fact, and I trust that the main idea or the most important things will just stay in my brain, and not having tests also gives me the freedom to take my time learning things.' Because I – and everyone I know – was raised in such a different system, I found this, at first glance, overwhelmingly weird.

“我没有感受到学习每一个事实的压力，我相信主要思想或最重要的事情只会留在我的大脑中，而且没有测试也让我可以自由地花时间学习东西。’因为我——以及我认识的每个人——都是在如此不同的系统中长大的，所以乍一看，我发现这非常奇怪。

Given the freedom to do nothing, wouldn't most kids go crazy and indulge themselves? There aren't even formal lessons in reading at Sudbury, though kids can ask the staff, or each other, to show them how reading works. Surely, I thought at first, this produces semi-literates?

如果有什么都不做的自由，大多数孩子不是会发疯并放纵自己吗？萨德伯里甚至没有正式的阅读课程，尽管孩子们可以询问工作人员或互相询问，向他们展示阅读是如何进行的。我一开始想，这肯定会产生半文盲吗？

I wanted to know what the outcome of this kind of education is, so I went to interview Professor Peter Gray, a research psychologist at Boston College who tracked down the alumni of Sudbury Valley School to see how they turned out. Were they undisciplined wrecks who couldn't function in the modern world?

我想知道这种教育的结果是什么，所以我去采访了波士顿学院的研究心理学家彼得·格雷教授，他追踪了萨德伯里谷学校的校友，看看他们的结局如何。他们是没有纪律、无法在现代世界生存的废物吗？

It turned out that over 50 percent went on to higher education, and almost all of them, he has written, have been 'remarkably successful in finding employment that interested them and earned them a living.

事实证明，超过 50% 的人继续接受高等教育，他写道，几乎所有人

都“非常成功地找到了自己感兴趣并谋生的工作”。

They had gone on, successfully, to a wide range of occupations, including business, arts, science, medicine, other service professions, and skilled trades.’ There have been similar results for other kids like them in other places.

他们成功地从事了各种各样的职业，包括商业、艺术、科学、医学、其他服务行业和技术行业。”在其他地方，像他们一样的其他孩子也得到了类似的结果。

Peter’s research found that kids who have been ‘unschooled’ like this were more likely to go on to higher education than other kids.

彼得的研究发现，像这样“未受过教育”的孩子比其他孩子更有可能继续接受高等教育。

How can that be? Peter explained to me that in fact for most of human history, children have learned in the way they do at Sudbury.

怎么可能？彼得向我解释说，事实上，在人类历史的大部分时间里，孩子们都是按照他们在萨德伯里的方式学习的。

He studied the evidence that’s been gathered about children in hunter-gatherer societies – the way humans lived until, in evolutionary terms, the day before yesterday.

他研究了在狩猎采集社会中收集到的有关儿童的证据——从进化的角度来看，这是前天人类的生活方式。

There, kids will play, mill around, imitate adults, ask lots of questions, and slowly, over time, they become competent, without being formally instructed very much.

在那里，孩子们会玩耍、转来转去、模仿成年人、提出很多问题，随着时间的推移，他们慢慢地变得有能力，而无需接受太多正式指导。

The anomaly isn’t Sudbury, he explained – it’s the modern school, which was designed very recently, in the 1870s, to train children to sit still, shut up and do what they are told, to prepare them to work in factories.

他解释说，异常现象并不在于萨德伯里，而是一所现代学校，该学校是在 1870 年代刚刚设计的，目的是训练孩子们安静地坐着、闭嘴并按照指示做事，为他们在工厂工作做好准备。

He told me that children evolved to be curious and to explore their environment. They naturally want to learn, and they'll do it spontaneously when they can pursue things that seem interesting to them. They learn primarily by playing freely.

他告诉我，孩子们进化出了好奇心并探索他们的环境。他们自然而然地想要学习，当他们能够追求自己感兴趣的事情时，他们就会自发地学习。他们主要通过自由玩耍来学习。

His research found that Sudbury was particularly effective with kids who had been told that they had learning problems. Of the eleven students he studied who had been judged to have 'serious learning difficulties' before they arrived at Sudbury, four went on to receive college degrees and a fifth was enrolled to get one.

他的研究发现，萨德伯里对于那些被告知有学习问题的孩子特别有效。在他研究的十一名学生中，他们在到达萨德伯里之前被认为有“严重的学习困难”，其中四名学生继续获得大学学位，五名学生入学以获得大学学位。

These findings are important but need to be handled with a bit of caution. Sudbury Valley charges fees between \$7,500 and \$10,000 a year – so the parents who send their kids there already have more financial advantages than the rest of the population.

这些发现很重要，但需要谨慎处理。萨德伯里谷每年收取 7,500 至 10,000 美元的费用，因此将孩子送到那里的父母已经比其他人拥有更多的经济优势。

That means their kids would already – in any circumstances – be more likely to go on to higher education, and the parents themselves are also quite likely to teach their kids some stuff at home.

这意味着他们的孩子在任何情况下都更有可能继续接受高等教育，而且父母自己也很可能在家教孩子一些东西。

So the success of the kids at Sudbury Valley can't be attributed solely

to the school.

因此，萨德伯里谷孩子们的成功不能仅仅归功于学校。

But Peter argues this model is doing something that does boost real learning, in a way conventional schools don't. To understand why, he says we should look at the evidence for what happens when animals are deprived of play.

但彼得认为，这种模式确实能够促进真正的学习，而传统学校却无法做到这一点。他说，为了理解其中的原因，我们应该看看当动物被剥夺玩耍时会发生什么的证据。

For example, he told me he started to study this subject after he was struck by a typical study – which I later read myself – which compared two groups of rats. The first was prevented from playing with other rats at all. The second was allowed to play with other rats for one hour a day. The scientists then watched as they grew up, to see if there were any differences.

例如，他告诉我，在一项典型的研究（我后来自己读过）对两组老鼠进行比较后，他开始研究这个课题。第一只老鼠根本无法与其他老鼠玩耍。第二只老鼠每天被允许与其他老鼠玩耍一小时。然后，科学家们观察它们的成长过程，看看是否存在任何差异。

By the time they became adults, the play-deprived rats experienced much more fear and anxiety, and they were much less able to deal with unexpected events. The rats who got to play were braver, more likely to explore, and better able to cope with new situations.

当它们成年时，那些被剥夺玩耍的老鼠会经历更多的恐惧和焦虑，而且它们处理意外事件的能力也大大降低。参与游戏的老鼠更勇敢，更愿意探索，并且能够更好地应对新情况。

They tested both sets of rats for their ability to solve new problems – they set it up so that in order to get food, the rats would have to figure out a new sequence. It turned out the rats who had been allowed to play when they were young were significantly smarter.

他们测试了两组老鼠解决新问题的能力——他们设置了这样的条件：为了获得食物，老鼠必须找出新的顺序。事实证明，小时候被允许玩耍的老鼠明显更聪明。

At Sudbury, Hannah told me that once she was free from the mindless and meaningless grilling of standardised schooling, she found ‘I really appreciate education more, and I’m excited to learn, and I want to pursue different things.

在萨德伯里，汉娜告诉我，一旦她摆脱了标准化学校教育的无意识和无意义的拷问，她发现“我真的更欣赏教育，我很高兴学习，我想追求不同的东西。”

Since I don’t feel like I’m being forced to, I’m motivated to do that.’ This fits with a wider body of scientific evidence – the more something is meaningful, the easier it is to pay attention to it and learn, for adults and kids.

因为我不觉得自己被迫这样做，所以我有动力这样做。”这符合更广泛的科学证据——某件事越有意义，就越容易关注和学习，适合成人和儿童。

Standardised schooling too often drains learning of meaning, while progressive schooling tries to infuse it into everything.

标准化的学校教育常常会耗尽对意义的学习，而渐进式的学校教育则试图将意义融入到一切事物中。

This is why the best research on this question shows that kids at more progressive schools are more likely to retain what they’ve learned in the long run, more likely to want to carry on learning, and more likely to be able to apply what they’ve learned to new problems. These, it seems to me, are amongst the most precious forms of attention.

这就是为什么关于这个问题的最佳研究表明，从长远来看，更进步的学校的孩子更有可能保留他们所学的知识，更有可能想要继续学习，并且更有可能应用他们所学的知识。已经学会了新的问题。在我看来，这些都是最宝贵的关注形式。

Standing outside Sudbury, Hannah told me she used to long for the school day to end, but now, ‘I don’t want to go home.’ The other kids I spoke with told me they had a similar point of view, before they ran off to join some collective activity with other children.

站在萨德伯里外，汉娜告诉我，她过去常常渴望放学，但现在，“我不想回家。”与我交谈的其他孩子告诉我，他们也有类似的观点，然后他们

就跑去和其他孩子一起参加一些集体活动。

I found it startling to discover that you can throw out almost everything we regard as schooling – all the testing, all the assessments, even formal teaching – and still produce people who can read, write and function in society.

我惊讶地发现，你可以抛弃几乎所有我们认为学校教育的东西——所有的测试、所有的评估，甚至正式的教学——而仍然培养出能够阅读、写作和在社会中发挥作用的人。

This tells you how much of what we are neurotically putting our kids through is pointless (at best).

这告诉你，我们神经质地让孩子经历的事情有多少是毫无意义的（充其量）。

Personally, my instinct is that Sudbury goes too far. I went to other progressive schools to see if there's a way you can mix much greater freedom with some adult guidance. One I particularly liked was in Berlin, named the Evangelische Schule Berlin Zentrum. There, the kids decide collectively on a topic they want to investigate – when I visited, it was whether humans can live in space.

就我个人而言，我的直觉是萨德伯里走得太远了。我去了其他进步学校，看看是否有一种方法可以将更大的自由与一些成人指导结合起来。我特别喜欢的是柏林的一所名为“Evangelische Schule Berlin Zentrum”的学校。在那里，孩子们集体决定他们想要研究的主题——当我参观时，主题是人类是否可以在太空中生活。

Then, for a whole term, half of all their lessons are built around investigating this question – they investigate the physics of how to build rockets, the history of going to the moon, the geography of what would grow on other planets.

然后，在整个学期中，他们一半的课程都是围绕研究这个问题展开的——他们研究如何建造火箭的物理学、登月的历史、在其他行星上生长的地理。

It builds to a big collective project – they were literally building a rocket in their classroom. In this way, subjects that seemed dry and

boring when they are broken up and rote-learned were infused for these kids with meaning, and they wanted to know more about them.

它是一个大型集体项目——他们实际上是在教室里建造一枚火箭。这样，那些被拆散死记硬背背后显得枯燥乏味的科目，对这些孩子来说就变得有意义了，他们想了解更多。

Because I had grown up in such a different system, I kept having doubts about these alternatives. But I kept coming back to one key fact: the country that is often judged by international league tables to have the most successful schools in the world, Finland, is closer to these progressive models than anything we would recognise. Their children don't go to school at all until they are seven years old – before then, they just play. Between the ages of seven and sixteen, kids arrive at school at 9 a.m. and leave at 2 p.m. They are given almost no homework, and they sit almost no tests until they graduate from high school.

因为我是在如此不同的系统中长大的，所以我一直对这些替代方案心存疑虑。但我不断地回到一个关键事实：芬兰这个经常被国际排行榜评为拥有世界上最成功学校的国家，比我们所认识的任何国家都更接近这些进步模式。他们的孩子直到七岁才上学——在那之前，他们只是玩耍。七岁至十六岁的孩子上午 9 点到校，下午 2 点放学。他们在高中毕业之前几乎没有家庭作业，也几乎没有参加任何考试。

Free play is at the beating heart of Finnish kids' lives: by law, teachers have to give kids fifteen minutes of free play for every forty-five minutes of instruction. What's the outcome?

自由玩耍是芬兰孩子生活的核心：根据法律，老师每进行四十五分钟的教学，就必须给孩子们十五分钟的自由玩耍时间。结果如何？

Only 0.1 percent of their kids are diagnosed with attention problems, and Finns are among the most literate, numerate and happy people in the world.

只有 0.1% 的孩子被诊断出注意力有问题，而芬兰人是世界上最有文化、最会计算、最快乐的人之一。

Hannah told me as I was leaving that when she remembers her time at a conventional high school, 'I see myself sitting at a desk, and it's all grey. It's this weird image.' She told me she worries about her

friends still stuck in that system.

当我离开时，汉娜告诉我，当她回忆起自己在一所传统高中的时光时，“我看到自己坐在一张桌子前，周围都是灰色的。”这是这个奇怪的图像。”她告诉我，她担心她的朋友们仍然被困在这个系统中。

‘They hate it, and I feel bad they don’t have the opportunity to do something else.’

“他们讨厌这样，我为他们没有机会做其他事情而感到难过。”



When adults notice that children and teens seem to be struggling to focus and pay attention today, we often say it with a weary and exasperated superiority. The implication is – look at this degraded younger generation! Aren’t we better than them? Why can’t they be like us?

当成年人注意到今天的儿童和青少年似乎很难集中注意力时，我们常常带着一种疲倦和恼怒的优越感说出来。言下之意就是——看看这堕落的年轻一代！我们不比他们好吗？为什么他们不能像我们一样？

But after learning all this, I think about it very differently. Children have needs – and it’s our job, as adults, to create an environment that meets those needs. In many cases, in this culture, we aren’t meeting those needs.

但在了解了这一切之后，我的想法就截然不同了。孩子们有需求——作为成年人，我们的工作就是创造一个满足这些需求的环境。在很多情况下，在这种文化中，我们无法满足这些需求。

We don’t let them play freely; we imprison them in their homes, with little to do except interact via screens; and our school system largely deadens and bores them.

我们不让他们自由发挥；我们将他们囚禁在家里，除了通过屏幕互动之外几乎无事可做；我们的学校制度很大程度上让他们变得麻木和无聊。

We feed them food that causes energy crashes, contains drug-like additives that can make them hyper, and doesn’t contain the nutrients

they need. We expose them to brain-disrupting chemicals in the atmosphere.

我们给它们喂食的食物会导致能量崩溃，含有类似药物的添加剂，可以让它们亢奋，而且不含它们所需的营养。我们将它们暴露在大气中干扰大脑的化学物质中。

It's not a flaw in them that, as a result, they are struggling to learn attention. It's a flaw in the world we built for them.

因此，他们努力学习注意力并不是他们的缺陷。这是我们为他们建造的世界中的一个缺陷。



Now, when Lenore speaks to parents, she still gets them to talk about the happiest moments in their own childhoods. It's almost always a moment when they were free – building a fort, walking through the woods with friends, playing out in the street. She says to them: 'We're scrimping and saving to send them to the dance class,' but when it comes down to it, 'You're not giving them the thing you loved the most.' We don't have to continue like this, she tells them.

现在，当莱诺尔与父母交谈时，她仍然让他们谈论自己童年中最快乐的时刻。这几乎总是他们空闲的时刻——建造堡垒、和朋友一起穿过树林、在街上玩耍。她对他们说：“我们正在省吃俭用地送他们去舞蹈班，”但归根结底，“你没有给他们你最喜欢的东西。”我们不必这样做继续这样，她告诉他们。

There's a different childhood waiting for our kids, if we commit, together, to rebuild it – one where they can learn, like L.B. building his boats, to focus deeply again.

如果我们共同致力于重建一个不一样的童年，等待着我们的孩子——一个他们可以学习的童年，就像 L.B.建造他的船，再次深入专注。

Conclusion

结论

Attention Rebellion

注意力叛乱

If this was a self-help book, I would be able to serve up a delightfully simple conclusion to this story. Those books have a very satisfying structure: the author identifies a problem – usually one he's had himself – and he talks you through how he personally solved it.

如果这是一本自助书，我就能为这个故事提供一个令人愉快的简单结论。这些书有一个非常令人满意的结构：作者指出了一个问题——通常是他自己遇到的问题——然后他向你讲述他个人是如何解决这个问题的。

Then he says – and now, dear reader, you can do what I have done, and it will set you free. But this is not a self-help book, and what I have to say to you is more complex, and it means starting with an admission: I have not entirely solved this problem in myself.

然后他说——现在，亲爱的读者，你可以做我所做的事情，这会让你获得自由。但这不是一本自助书，我要对你说的更复杂，这意味着首先要承认：我自己还没有完全解决这个问题。

In fact, at this moment, as I write this in lockdown, my attention has never been worse.

事实上，此时此刻，当我在封锁中写下这篇文章时，我的注意力从未如此糟糕。

For me, the collapse came in a strange dream-like month. In February 2020 I walked into Heathrow Airport to board a flight to Moscow. I was on my way to interview James Williams, the former Google strategist who you've seen quoted throughout this book. As I hurried through the alienating yellow light of the airport towards my gate, I noticed something strange. Some of the staff were wearing face masks.

对我来说，崩溃发生在一个奇怪的梦幻般的月份。2020年2月，我走进希思罗机场，登上飞往莫斯科的航班。我正在去采访詹姆斯·威廉姆斯（James Williams）的路上，他是前谷歌战略家，你在本书中都看到过他的引用。当我匆匆穿过机场令人疏远的黄灯走向登机口时，我注意到了一些奇怪的事情。部分工作人员戴着口罩。

I had, of course, read in the news about the new virus that had emerged in Wuhan in China, but I assumed – as so many of us did – that like the swine flu or Ebola crises a few years before, this problem would be contained at source before it could become a pandemic.

当然，我在新闻中读到过有关中国武汉出现的新病毒的消息，但我认为——正如我们许多人所做的那样——就像几年前的猪流感或埃博拉危机一样，这个问题将是在其成为大流行病之前就从源头上遏制住了它。

I felt a flicker of irritation at what I saw as their paranoia, and I boarded my flight.

我对他们的偏执感到一阵恼火，于是我登上了航班。

I landed into a freakishly warm Russian winter. There was no snow on the ground, and people were wearing T-shirts and selling off their fur coats for a pittance. As I strolled through the eerily snowless streets, I felt tiny and disorientated.

我进入了俄罗斯异常温暖的冬天。地上没有积雪，人们穿着T恤，以微薄的价格出售皮大衣。当我漫步在无雪的街道上时，我感到自己渺小而迷失方向。

Everything in Moscow is vast – people live in enormous concrete

lumps of apartment blocks, and they work in ugly fortresses, and they trudge between them across eight-lane highways.

莫斯科的一切都是巨大的——人们住在巨大的混凝土公寓楼里，他们在丑陋的堡垒里工作，他们在八车道的高速公路上艰难地穿梭于堡垒之间。

The city is designed to make the collective seem vast and to make you, the individual, feel like a speck on the wind.

这座城市的设计目的是让集体显得广阔，而让你个人感觉像风中的一粒。

James was living in a nineteenth-century Moscow apartment block, and as we sat in front of a huge bookcase filled with Russian classics, I felt like I had stumbled into a Tolstoy novel. He was living there partly because his wife worked for the World Health Organization, and partly because he loved Russian culture and philosophy.

詹姆斯住在莫斯科一栋十九世纪的公寓楼里，当我们坐在一个装满俄罗斯经典著作的巨大书柜前时，我感觉自己好像无意中读到了一本托尔斯泰的小说。他住在那里，部分原因是他的妻子在世界卫生组织工作，部分原因是他热爱俄罗斯文化和哲学。

He told me that after years of studying focus, he has come to believe that attention takes three different forms – all of which are now being stolen. When we went through them, it clarified for me a lot of what I had learned so far.

他告诉我，经过多年的注意力研究，他开始相信注意力有三种不同的形式——所有这些现在都被窃取了。当我们仔细阅读它们时，我澄清了迄今为止学到的很多东西。

The first layer of your attention, he said, is your *spotlight*. This is when you focus on ‘immediate actions’, like, ‘I’m going to walk into the kitchen and make a coffee.’ You want to find your glasses? You want to see what’s in the fridge? You want to finish reading this chapter of my book? It’s called the *spotlight* because – as I explained earlier – it involves narrowing down your focus. If your spotlight gets distracted or disrupted, you are prevented from carrying out near-term actions like this.

他说，你注意力的第一层是你的聚光灯。这是当你专注于“立即行

动”的时候，比如，“我要走进厨房煮咖啡。”你想找到你的眼镜吗？你想看看冰箱里有什么吗？你想读完我书中的这一章吗？它被称为聚光灯，因为正如我之前解释的那样，它涉及缩小你的焦点。如果你的注意力分散或受到干扰，你就无法执行这样的近期行动。

The second layer of your attention is your *starlight*. This is, he says, the focus you can apply to your ‘longer-term goals – projects over time’. You want to write a book. You want to set up a business. You want to be a good parent.

你注意力的第二层是你的星光。他说，这是你可以应用于“长期目标——随着时间的推移的项目”的重点。你想写一本书。您想创业。你想成为一个好父母。

It’s called the starlight because when you feel lost, you look up to the stars, and you remember the direction you are travelling in. If you become distracted from your starlight, he said, you ‘lose sight of the longer-term goals’. You start to forget where you are headed.

它被称为星光，因为当你感到迷失时，你会仰望星空，并记住你前进的方向。他说，如果你从星光中分心，你就会“看不到长期目标”。你开始忘记自己要去哪里。

The third layer of your attention is your *daylight*. This is the form of focus that makes it possible for you to know what your longer-term goals are in the first place. How do you know you want to write a book? How do you know you want to set up a business? How do you know what it means to be a good parent? Without being able to reflect and think clearly, you won’t be able to figure these things out.

你注意力的第三层是你的日光。这种专注形式使您能够首先了解自己的长期目标是什么。你怎么知道你想写一本书？您怎么知道您想创业？你怎么知道成为一个好父母意味着什么？如果你不能够清晰地反思和思考，你就无法弄清楚这些事情。

He gave it this name because it’s only when a scene is flooded with daylight that you can see the things around you most clearly.

他给它起了这个名字，因为只有当场景充满日光时，你才能最清楚地看到周围的事物。

If you get so distracted that you lose your sense of the daylight, James

says, 'In many ways you may not even be able to figure out who you are, what you wanted to do, [or] where you want to go.'

詹姆斯说，如果你分心以至于失去了对日光的感觉，“在很多方面，你甚至可能无法弄清楚你是谁，你想做什么，[或]你想去哪里。”

He believes that losing your daylight is 'the deepest form of distraction', and you may even begin 'decohering'. This is when you stop making sense to yourself, because you don't have the mental space to create a story about who you are.

他认为，失去阳光是“最深层的分心形式”，你甚至可能开始“分散注意力”。这就是你对自己失去意义的时候，因为你没有足够的心理空间来创造一个关于你是谁的故事。

You become obsessed with petty goals, or dependent on simplistic signals from the outside world like retweets. You lose yourself in a cascade of distractions.

你变得沉迷于琐碎的目标，或者依赖于来自外界的简单信号，比如转发。你会在一系列的干扰中迷失自己。

You can only find your starlight and your daylight if you have sustained periods of reflection, mind-wandering and deep thought. James has come to believe that our attention crisis is depriving us of all three of these forms of focus. We are losing our light.

只有持续不断的反思、走神和深思熟虑，你才能找到属于自己的星光和日光。詹姆斯开始相信，我们的注意力危机正在剥夺我们这三种形式的注意力。我们正在失去光明。

He said a different metaphor might also help us to understand this. Sometimes, hackers decide to attack a website in a very specific way.

他说一个不同的比喻也可能有助于我们理解这一点。有时，黑客决定以非常特定的方式攻击网站。

They get an enormous number of computers to try to connect to a website all at once – and by doing this, they 'overwhelm its capacity for managing traffic, to the point where it can't be accessed by anyone else, and it goes down'. It crashes. This is called a 'denial-of-service attack'. James thinks we are all living through something like a

denial-of-service attack on our minds.

他们使用大量计算机来尝试同时连接到一个网站 - 通过这样做，他们“压垮了网站管理流量的能力，以至于其他任何人都无法访问该网站，然后网站就瘫痪了”。它崩溃了。这称为“拒绝服务攻击”。詹姆斯认为我们都在经历类似思想上的拒绝服务攻击。

‘We’re that server, and there’s all these things trying to grab our attention by throwing information at us ... It undermines our capacity for responding to anything.

“我们就是那个服务器，所有这些东西都试图通过向我们扔信息来吸引我们的注意力.....它削弱了我们响应任何事情的能力。

It leaves us in a state of either distraction, or paralysis.’ We are so inundated ‘that it fills up your world, and you can’t find a place to get a view on all of it and realise that you’re so distracted and figure out what to do about it.

它让我们处于一种心烦意乱或瘫痪的状态。“我们被淹没了，它填满了你的世界，你找不到一个地方来观察这一切，并意识到你是如此心烦意乱”并弄清楚该怎么做。

It can just colonise your entire world,’ he said. You are left so depleted that ‘you don’t get the space to push back against it’.

它可以殖民你的整个世界，”他说。你会感到如此疲惫，以至于“你没有空间来反击它”。

I left James’s apartment and walked the streets of the Russian capital, and I began to wonder if there is, in fact, a fourth form of attention. I would call it our *stadium lights* – it’s our ability to see each other, to hear each other, and to work together to formulate and fight for collective goals. I could see a creepy example of what happens when this is lost unfolding all around me.

我离开詹姆斯的公寓，走在俄罗斯首都的街道上，我开始怀疑是否真的存在第四种形式的注意力。我将其称为我们的体育场之光——它是我们看到彼此、听到彼此、共同努力制定集体目标并为之奋斗的能力。我可以看到一个令人毛骨悚然的例子，当这个失去时会发生什么在我周围展开。

I was in Moscow in winter, and people were walking around outside in T-shirts because it was so warm. A heatwave was just starting in Siberia – a sentence I never thought I would write. The climate crisis couldn't be clearer – Moscow itself, ten years before, had been choked by the smoke from severe wildfires. But there is very little climate activism in Russia, nor – given the scale of the crisis – anywhere in the world.

冬天我在莫斯科，人们穿着 T 恤在外面走来走去，因为天气太暖和了。西伯利亚刚刚开始热浪——这是我从未想过会写的一句话。气候危机再清楚不过了——十年前，莫斯科本身就被严重野火产生的烟雾所窒息。但考虑到危机的规模，俄罗斯以及世界任何地方的气候行动主义都很少。

Our attention is occupied with other, less important things. I knew I was more guilty in this than most – I thought about my own horrendous carbon emissions.

我们的注意力被其他不太重要的事情占据了。我知道我在这方面比大多数人更有罪——我想到了自己可怕的碳排放量。

As I flew back to London, I felt like on this long journey I had learned a huge amount about attention – and I felt I could fix mine a little, step by step.

当我飞回伦敦时，我觉得在这段漫长的旅程中我学到了很多关于注意力的知识——而且我觉得我可以一步一步地改善我的注意力。

When I landed, I noticed that everyone who worked at the airport was now wearing a mask, and the newspaper stands were full of images of hospitals in Italy where people were dying on the floor or in the corridors.

当我降落时，我注意到在机场工作的每个人都戴着口罩，报摊上贴满了意大利医院的照片，人们在地板上或走廊里死去。

I didn't know it then, but these were the last days before air travel all but ceased across the world. Soon after, Heathrow would be empty and echoing.

我当时并不知道，但这是世界各地航空旅行几乎停止之前的最后几

天。不久之后，希思罗机场就空无一人，回声四起。

A few days later, I was walking home when I noticed that my teeth were chattering. It was a mild winter in London too, and I assumed I was caught in a cold draught, but by the time I got home half an hour later, I was shivering and shaking.

几天后，当我走回家时，我发现我的牙齿在打战。伦敦的冬天也很温和，我以为自己是被冷风吹到了，但半小时后我回到家时，我已经浑身发抖了。

I crawled into bed, and I didn't get out again, except to go to the bathroom, for three weeks. I had a raging temperature, and I became feverish and almost delusional. By the time I was able to understand what was going on, British Prime Minister Boris Johnson was appearing on television telling everyone that they must not leave their homes, and then, soon after, he was in hospital himself, almost dead. It was like a stress dream, where the walls of reality start to collapse.

我爬上床，三个星期以来，除了去洗手间之外，我没有再出去过。我发烧了，发烧了，几乎出现了幻觉。当我能够了解发生了什么事时，英国首相鲍里斯·约翰逊出现在电视上，告诉所有人他们不能离开家，然后不久之后，他自己也住进了医院，几乎死了。这就像一场压力梦，现实的墙壁开始倒塌。



Up to this point, I had been applying what I'd learned on this journey steadily, step by step, to improve my own attention. I'd made six big changes in my life.

到目前为止，我一直在稳步地、一步一步地运用我在这一旅程中学到的东西来提高自己的注意力。我的生活发生了六项重大改变。

One: I used pre-commitment to stop switching tasks so much. Pre-commitment is when you realise that if you want to change your behaviour, you have to take steps now that will lock in that desire and make it harder for you to crack later.

一：我用预先承诺来停止那么多的任务切换。预先承诺是指当您意识到如果您想改变自己的行为时，您必须立即采取措施来锁定这种愿望，并使您以后更难实现。

One key step for me was buying a kSafe, which – as I mentioned briefly before – is a large plastic safe with a removable lid.

对我来说，一个关键的步骤是购买一个 kSafe，正如我之前简要提到的，它是一个带有可拆卸盖子的大型塑料保险箱。

You put your phone in it, put the lid back on, and turn the dial at the top for however long you want – from fifteen minutes to two weeks – and then it locks your phone away for as long as you selected. Before I went on this journey, my use of it was patchy.

你把手机放进去，盖上盖子，然后转动顶部的转盘，无论你想要多长时间——从十五分钟到两周——然后它就会根据你的选择锁定你的手机。在我踏上这段旅程之前，我对它的使用是不完整的。

Now I use it every day without exception, and that buys me long stretches of focus. I also use on my laptop a program called Freedom, which cuts it off from the internet for as long as I select. (As I write this sentence, it's counting down from three hours.)

现在我都每天都毫无例外地使用它，这让我能够长时间保持专注。我还在我的笔记本电脑上使用了一个名为 Freedom 的程序，只要我选择，它就会切断它与互联网的连接。（当我写下这句话时，已经从三个小时开始倒计时了。）

Two: I have changed the way I respond to my own sense of distraction. I used to reproach myself, and say – you're lazy, you're not good enough, what's wrong with you? I tried to shame myself into focusing harder. Now, based on what Mihaly Csikszentmihalyi taught me, instead I have a very different conversation with myself. I ask: What could you do now to get into a flow state, and access your mind's own ability to focus deeply? I remember what Mihaly taught me are the main components of flow, and I say to myself: What would be something meaningful to me that I could do now? What is at the edge of my abilities?

第二：我改变了对自己分心的感觉的反应方式。我常常责备自己，说——你懒，你不够好，你怎么了？我试图羞辱自己，让自己更加集中注意力。现在，根据 Mihaly Csikszentmihalyi 教给我的内容，我与自己进行了一次非常不同的对话。我问：你现在可以做什么来进入心流状态，并利用你的思维深度专注的能力？我记得米哈里教给我的是心流的主要

组成部分，我对自己说：我现在可以做哪些对我有意义的事情？我能力的边缘是什么？

How can I do something that matches these criteria now? Seeking out flow, I learned, is far more effective than self-punishing shame.

我现在怎样才能做一些符合这些标准的事情呢？我发现，寻求心流远比自我惩罚羞耻更有效。

Three: based on what I learned about the way social media is designed to hack our attention spans, I now take six months of the year totally off it. (This time is divided into chunks, usually of a few weeks).

第三：根据我对社交媒体旨在破坏我们注意力广度的方式的了解，我现在一年中有六个月完全不使用社交媒体。（这个时间被分成几个部分，通常是几周）。

To make sure I stick to it, I always announce publicly when I am going off – I'll tweet that I am leaving the site for a certain amount of time, so that I will feel like a fool if I suddenly crack and go back a week later. I also get my friend Lizzie to change my passwords.

为了确保我坚持下去，我总是在我离开时公开宣布——我会在推特上说我将离开该网站一段时间，这样如果我突然崩溃并返回，我会觉得自己像个傻瓜一个星期后。我还让我的朋友 Lizzie 更改我的密码。

Four: I acted on what I learned about the importance of mind-wandering. I realised that letting your mind wander is not a crumbling of attention, but in fact a crucial form of attention in its own right.

第四：我根据我所了解到的走神重要性采取了行动。我意识到，让你的思绪游离并不是注意力的崩溃，事实上，注意力本身就是一种重要的形式。

It is when you let your mind drift away from your immediate surroundings that it starts to think over the past, and starts to game out the future, and makes connections between different things you have learned.

当你让你的思绪远离周围的环境时，它就会开始思考过去，开始规划

未来，并在你学到的不同事物之间建立联系。

Now I make it a point to go for a walk for an hour every day without my phone or anything else that could distract me. I let my thoughts float and find unexpected connections.

现在，我每天都会出去散步一小时，不要带手机或任何其他可能分散我注意力的东西。我让自己的思绪飘浮并找到意想不到的联系。

I found that precisely because I give my attention space to roam, my thinking is sharper, and I have better ideas.

我发现正是因为我给了我注意力漫游的空间，我的思维更加敏锐，我的想法也更好。

Five: I used to see sleep as a luxury, or – worse – as an enemy. Now I am strict with myself about getting eight hours every night.

五：我曾经将睡眠视为一种奢侈，或者更糟糕的是，将睡眠视为敌人。现在我对自已严格要求，每天晚上要睡八个小时。

I have a little ritual where I make myself unwind: I don't look at screens for two hours before I go to bed, and I light a scented candle and try to set aside the stresses of the day.

我有一个让自己放松的小仪式：睡觉前两个小时我不看屏幕，我会点燃一支香薰蜡烛，试图抛开一天的压力。

I bought a FitBit device to measure my sleep, and if I get less than eight hours, I make myself go back to bed. This made a really big difference.

我买了一台 FitBit 设备来测量我的睡眠时间，如果我的睡眠时间少于八小时，我就会让自己回去睡觉。这确实带来了很大的不同。

Six: I'm not a parent, but I am very involved in the lives of my godchildren and my young relatives. I used to spend a lot of my time with them deliberately doing things – busy, educational activities I would plan out in advance.

六：我不是父母，但我非常参与我的教子和年轻亲戚的生活。我曾经花很多时间和他们一起故意做一些事情——我会提前计划好的忙碌的、

有教育意义的活动。

Now I spend most of my time with them just playing freely, or letting them play on their own without being managed or over-supervised or imprisoned. I had learned that the more free play they get, the more sound a foundation they will have for their focus and attention.

现在，我大部分时间都和他们一起自由玩耍，或者让他们自己玩耍，而不受管理、过度监督或监禁。我了解到，他们获得的自由活动越多，他们的注意力就越有坚实的基础。

I try to give them as much of that as I can.

我尽力为他们提供尽可能多的东西。

I would like to be able to tell you that I also did other things I learned I should do to improve my focus – cut out processed foods, meditate every day, build in other slow practices like yoga, and take an extra day off work each week.

我想告诉你，我还做了其他一些我应该做的事情来提高我的注意力——戒掉加工食品，每天冥想，进行瑜伽等其他缓慢的练习，以及每天多休息一天星期。

The truth is I struggle with this – so much of how I deal with ordinary anxiety is tied up with comfort eating and overworking.

事实上，我对此很挣扎——我处理普通焦虑的方式很大程度上与舒适饮食和过度工作有关。

But I would estimate that by making these six changes, I had – by the time I went to Moscow – improved my own focus by about 15 to 20 percent, which is a fair whack. It made a real and marked difference to my life. All of these changes are worth trying, and there will probably be other tweaks to your life that you are considering based on what you've read in this book. I am strongly in favour of individuals making the changes they can in their personal lives.

但我估计，通过做出这六项改变，当我去莫斯科时，我自己的注意力提高了约 15% 到 20%，这是一个相当不错的打击。它给我的生活带来了真正而显着的改变。所有这些改变都值得尝试，并且根据您在本书中所读到的内容，您可能正在考虑对您的生活进行其他调整。我强烈支持

个人在个人生活中做出力所能及的改变。

I am also in favour of being honest about the fact there are limits to how far that can take you.

我也赞成诚实地承认这样一个事实：你能走多远是有限的。



As I was recovering from Covid-19, I found myself in a weird mirror image of where I started this journey. I began by going to Provincetown for three months to escape the internet and cellphones. Now I was shut away for three months in my apartment with almost nothing but the internet and cellphones.

当我从 Covid-19 中恢复过来时，我发现自己处于一个奇怪的镜像中，就像我开始这段旅程的地方一样。我首先去普罗温斯敦三个月，以逃避互联网和手机。现在我被关在公寓里三个月了，除了互联网和手机之外几乎什么都没有。

Provincetown had liberated my focus and attention; the Covid-19 crisis brought it lower than it had ever been. For months, I couldn't focus on anything. I skipped from news channel to news channel, seeing fear and fever spread across the world.

普罗温斯敦解放了我的注意力。 Covid-19 危机使其低于以往任何时候。几个月来，我无法专注于任何事情。我从一个新闻频道跳到另一个新闻频道，看到恐惧和发烧在世界各地蔓延。

I took to spending hours listlessly watching live webcams of all the places I had been to research this book.

为了研究这本书，我花了几个小时的无精打采地观看我去过的所有地方的实时网络摄像头。

It didn't matter where they were – Memphis or Melbourne, Fifth Avenue in New York or Commercial Street in Provincetown – they were all the same: the streets were almost empty, except for short sightings of masked people scuttling. I was not alone in finding it impossible to focus.

无论它们在哪里——孟菲斯或墨尔本、纽约的第五大道或普罗温斯敦的商业街——它们都是一样的：街道几乎空无一人，除了短暂地看到蒙面人匆匆忙忙。我并不是唯一一个发现无法集中注意力的人。

Some of what I experienced was likely a biological after-effect of the virus – but many people who hadn't been infected were reporting a similar problem. There was a 300 percent increase in people googling 'how to get your brain to focus'.

我所经历的一些事情可能是该病毒的生物后遗症——但许多没有被感染的人也报告了类似的问题。在谷歌上搜索“如何让你的大脑集中注意力”的人数增加了 300%。

All over social media, people were saying they couldn't get their mind to work.

在社交媒体上，人们都在说他们无法集中精力工作。

But now, I felt, I had the tools to understand why this was happening to us. Your individual efforts to improve your attention can be dwarfed by an environment full of things that wreck it. This had been true for years leading up to Covid-19 – and it was even more true during it.

但现在，我觉得，我有了工具来理解为什么这种情况发生在我们身上。如果环境中充满了破坏注意力的事物，那么你个人为提高注意力所做的努力可能会显得相形见绌。在 Covid-19 爆发之前的几年里都是如此，在 Covid-19 期间更是如此。

Stress shatters attention, and we were all more stressed. There was a virus we couldn't see and didn't fully understand and it was threatening all of us. The economy was tanking and many of us were suddenly even more financially insecure. On top of this, our political leaders often seemed dangerously incompetent, which ramped up the stress further. For all these reasons, many of us were suddenly hypervigilant.

压力会分散注意力，我们的压力都更大了。有一种我们看不到、也不能完全理解的病毒，它正在威胁着我们所有人。经济不景气，我们中的许多人突然在经济上更加没有保障。除此之外，我们的政治领导人常常

显得无能到危险的地步，这进一步加剧了压力。由于所有这些原因，我们中的许多人突然变得高度警惕。

And how did we cope? We turned more heavily than ever before to our Silicon Valley-controlled screens, which were waiting for us, offering connection, or at least a hologram of it. As we used them more, our attention seemed to get worse. In the US, in April 2020, the average citizen spent thirteen hours a day looking at a screen.

我们是如何应对的？我们比以往任何时候都更加依赖硅谷控制的屏幕，这些屏幕正在等待着我们，提供连接，或者至少是它的全息图。随着我们使用它们的次数增多，我们的注意力似乎变得越来越差。2020年4月，美国公民平均每天花13个小时看屏幕。

The number of children looking at screens for more than six hours a day increased sixfold, and traffic to kids' apps trebled.

每天看屏幕超过六个小时的儿童数量增加了六倍，儿童应用程序的流量增加了两倍。

In this respect, Covid gave us a glimpse of the future we were already skidding towards. My friend Naomi Klein, a political writer who has made many strikingly accurate predictions about the future for twenty years, explained to me: 'We were on a gradual slide into a world in which every one of our relationships was mediated by platforms and screens, and because of Covid, that gradual process went into hyper-speed.' The tech companies were planning for us to be immersed in their world to such an extreme extent in a decade's time, not now.

在这方面，新冠疫情让我们看到了我们已经正在迈向的未来。我的朋友内奥米·克莱因 (Naomi Klein) 是一位政治作家，二十年来对未来做出了许多惊人准确的预测，她向我解释道：“我们正在逐渐滑入一个世界，在这个世界中，我们的每一个关系都由平台和屏幕来调节，科技公司计划让我们在十年后而不是现在完全沉浸在他们的世界中。

'The plan was not for it to leap in this way,' she said. 'That leaping is an opportunity, really – because when you do something that quickly, it comes as a shock to your system.' We didn't slowly acclimatise to it, and get hooked on its increasing patterns of reinforcements.

“计划并不是让它以这种方式跳跃，”她说。 “这种跳跃确实是一个机

会，因为当你这么快地做某件事时，你的系统就会受到冲击。”我们并没有慢慢适应它，而是沉迷于它不断增加的强化模式。

Instead, we got slammed headfirst into a vision of the future – and we realised ‘we hate it. It’s not good for our well-being.

相反，我们一头扎进对未来的愿景中——我们意识到‘我们讨厌它’。这对我们的福祉不利。

We desperately miss each other.’ Under Covid, even more than before, we were living in simulations of social life, not the real thing. It was better than nothing, to be sure – but it felt thinner. And all the while, the algorithms of surveillance capitalism were altering us – tracking and changing us – for many more hours a day.

我们非常想念彼此。”在新冠疫情下，我们比以前更加生活在模拟的社会生活中，而不是真实的生活中。当然，有总比没有好——但感觉更薄。与此同时，监视资本主义的算法每天都在更多的时间里改变我们——跟踪和改变我们。

I could see that in the pandemic, the environment changed and this wrecked our ability to focus. For many of us, the pandemic didn’t create new factors that ruined our attention – it supercharged the factors that had already been corroding our attention for years.

我可以看到，在大流行中，环境发生了变化，这破坏了我们集中注意力的能力。对于我们许多人来说，疫情并没有创造出新的因素来破坏我们的注意力，而是加剧了多年来已经侵蚀我们注意力的因素。

I saw this when I talked with my godson Adam, who I had taken to Memphis. His attention, which had been deteriorating for some time, was now shattered. He was on his phone almost every waking hour, seeing the world mainly through TikTok, a new app which made Snapchat look like a Henry James novel.

当我和我带去孟菲斯的教子亚当交谈时，我看到了这一点。他原本一直在恶化的注意力现在已经崩溃了。他几乎每天醒着的时候都在玩手机，主要通过 TikTok 看世界，这款新应用让 Snapchat 看起来就像亨利·詹姆斯的小说。

Naomi told me that the way we felt when we were spending all day in lockdown on Zoom and Facebook was awful but ‘also kind of a gift’,

because it showed us the road we were headed down with such clarity. More screens. More stress. More collapse of the middle class. More insecurity for the working class. More invasive technology.

内奥米告诉我，当我们一整天都被封锁在 Zoom 和 Facebook 上时，我们的感觉很糟糕，但“也是一份礼物”，因为它如此清晰地向我们展示了我们前进的道路。更多屏幕。压力更大。中产阶级更加崩溃。工人阶级更加不安全。更具侵入性的技术。

She calls this vision of the future the ‘Screen New Deal’. She told me: ‘The ray of hope in all of this is that we are in touch with how much we dislike this vision of the future that we have just trial run ... We weren’t going to have a trial run.

她将这种未来愿景称为“屏幕新政”。她告诉我：“这一切的希望之光，是我们知道我们有多么不喜欢我们刚刚试运行的未来愿景……我们不会进行试运行。”

We were going to have a gradual rollout. But we got a crash course.’

我们将逐步推出。但我们有一个速成班。

One thing was now very clear to me.

现在我很清楚一件事。

If we continue to be a society of people who are severely under-slept and overworked; who switch tasks every three minutes; who are tracked and monitored by social-media sites designed to figure out our weaknesses and manipulate them to make us scroll and scroll and scroll; who are so stressed that we become hypervigilant; who eat diets that cause our energy to spike and crash; who are breathing in a chemical soup of brain-inflaming toxins every day – then, yes, we will continue to be a society with serious attention problems. But there is an alternative.

如果我们的社会仍然是一个睡眠严重不足、工作过度的社会；每三分钟切换一次任务；谁被社交媒体网站跟踪和监控，这些网站旨在找出我们的弱点并操纵它们，让我们滚动、滚动、滚动；压力太大而变得高度警惕的人；他们的饮食会导致我们的能量激增和崩溃；他们每天都在吸入含有引起大脑炎症的毒素的化学汤——那么，是的，我们将继续成为一个存在严重注意力问题的社会。但还有一个替代方案。

It's to organise and fight back – to take on the forces that are setting fire to our attention, and replace them with forces that will help us to heal.

这是组织和反击——对抗那些引起我们注意的力量，并用有助于我们治愈的力量取而代之。

I started thinking about why we need to do this with an analogy that seemed to tie together a lot of what I had learned. Imagine you bought a plant and you wanted to help it grow. What would you do?

我开始思考为什么我们需要用一个类比来做到这一点，这个类比似乎将我学到的很多东西联系在一起。想象一下，您购买了一株植物，想要帮助它生长。你会怎么办？

You would make sure certain things were present: sunlight, and water, and soil with the right nutrients. And you would protect it from the things that could damage or kill it: you would plant it far from the trampling feet of other people, and from pests and diseases.

你要确保某些东西存在：阳光、水和含有适当养分的土壤。你会保护它免受可能损坏或杀死它的事物的影响：你会把它种植在远离其他人践踏的地方，远离害虫和疾病。

Your ability to develop deep focus is, I have come to believe, like a plant. To grow and flourish to its full potential, your focus needs certain things to be present: play for children and flow states for adults, to read books, to discover meaningful activities that you want to focus on, to have space to let your mind wander so you can make sense of your life, to exercise, to sleep properly, to eat nutritious food that makes it possible for you to develop a healthy brain, and to have a sense of safety.

我开始相信，你培养深度专注的能力就像植物一样。为了充分发挥其潜力，您的注意力需要存在某些东西：为儿童玩耍，为成人提供心流状态，读书，发现您想要关注的有意义的活动，有空间让您的思绪漫游这样你就可以理解你的生活，锻炼身体，正确睡眠，吃有营养的食物，使你的大脑发育健康，并有安全感。

And there are certain things you need to protect your attention from, because they will sicken or stunt it: too much speed, too much switching, too much stimuli, intrusive technology designed to hack and hook you, stress, exhaustion, processed food pumped with dyes that amp you up, polluted air.

你需要保护你的注意力免受某些事情的影响，因为它们会损害或阻碍你的注意力：太快的速度、太多的切换、太多的刺激、旨在攻击和吸引你的侵入性技术、压力、疲惫、含有大量物质的加工食品。让你兴奋的染料，污染的空气。

For a long time we took our attention for granted, as if it was a cactus that would grow in even the most desiccated climate. Now we know it's more like an orchid, a plant that requires great care or it will wither.

很长一段时间，我们认为我们的关注是理所当然的，就好像它是一棵仙人掌，即使在最干燥的气候下也能生长。现在我们知道它更像是兰花，是一种需要精心照料的植物，否则就会枯萎。

With this image in mind, I now had a sense of what a movement to reclaim our attention might look like. I would start with three big, bold goals. One: Ban surveillance capitalism, because people who are being hacked and deliberately hooked can't focus. Two: Introduce a four-day week, because people who are chronically exhausted can't pay attention. Three: Rebuild childhood around letting kids play freely – in their neighbourhoods and at school – because children who are imprisoned in their homes won't be able to develop a healthy ability to pay attention. If we achieve these goals, the ability of people to pay attention would, over time, dramatically improve.

有了这个形象，我现在就知道了一场重新唤起我们注意力的运动可能会是什么样子。我将从三个大胆的大目标开始。一：禁止监视资本主义，因为被黑客攻击和故意上钩的人无法集中注意力。二：实行每周四天的工作制，因为长期疲惫不堪的人无法集中注意力。三：重建童年，让孩子们在社区和学校自由玩耍，因为被囚禁在家里的孩子将无法培养健康的注意力能力。如果我们实现这些目标，随着时间的推移，人们的注意力将会显着提高。

Then we will have a solid core of focus that we could use to take the fight further and deeper.

然后我们将拥有一个坚实的焦点，我们可以用它来使战斗走得更远、

更深入。

The idea of building a movement sometimes seemed to me still quite hard to picture concretely – so I wanted to talk to people who had built movements around really big, impossible-seeming goals, and actually achieved them. My friend Ben Stewart was the head of communications at Greenpeace UK for years, and when I first met him more than fifteen years ago, he told me about a plan he was drawing up with other environmentalist activists. He explained that Britain was the birthplace of the Industrial Revolution, and this revolution had been powered by one thing: coal. Because coal contributes more than any other fuel to global warming, his team were drawing up a plan to force the government to end all new coal mines and new power stations in Britain, and move rapidly to leaving all the country's existing coal in the ground to ensure it will never be burned. When he explained it, I literally laughed out loud – Good luck to you, I said, I'm on your side, but you're being a dreamer.

有时，在我看来，开展一场运动的想法仍然很难具体地描绘出来——所以我想与那些围绕看似不可能的巨大目标开展运动并实际上实现了这些目标的人们交谈。我的朋友本·斯图尔特（Ben Stewart）多年来一直担任英国绿色和平组织的通讯主管，当我十五年前第一次见到他时，他告诉我他正在与其他环保活动人士一起制定一项计划。他解释说，英国是工业革命的发源地，这场革命的动力来自于一种东西：煤炭。由于煤炭对全球变暖的影响超过任何其他燃料，他的团队正在制定一项计划，迫使政府关闭英国所有新煤矿和新发电站，并迅速采取行动，将全国现有的所有煤炭留在地下。确保它永远不会被烧毁。当他解释时，我真的笑出了声——祝你好运，我说，我站在你一边，但你是一个梦想家。

Within five years, every single new coal mine and new coal power plant in Britain was stopped, and the government had been forced to set in stone plans to close down all the ones that already existed.

五年之内，英国的每一个新煤矿和新燃煤电厂都被停止，政府被迫制定关闭所有已经存在的煤矿和燃煤电厂的计划。

As a result of their campaign, the place that launched the world on the road to global warming had begun to seek out a path beyond it.

由于他们的活动，这个让世界走上全球变暖之路的地方已经开始寻找一条超越它的道路。

I wanted to talk to Ben about our attention crisis, and how we could

learn from other movements that have succeeded in the past. He said: 'I agree with you it's a crisis. It's a crisis for the human species.

我想和本谈谈我们的注意力危机，以及我们如何从过去成功的其他运动中学习。他说：“我同意你的观点，这是一场危机。这是人类的危机。

But I don't think it's being identified [like that] in the same way that structural racism or climate change [are].

但我认为它的识别方式与结构性种族主义或气候变化不同。

I don't think we're at that point yet ... I don't think that it's understood that it's a societal problem, and that it's caused by decisions by corporate actors, and that it can change.' So Ben told me the very first step to building a movement is to create a 'consciousness-raising breakthrough cultural moment, where people go – “Shit, my brain's been frazzled by this stuff.

我认为我们还没有到那个地步……我认为人们还没有理解这是一个社会问题，它是由企业参与者的决定引起的，而且它可以改变。”所以本告诉我发起一场运动的第一步是创造一个“提高意识的突破性文化时刻，人们会去那里——“妈的，我的大脑已经被这些东西弄得疲惫不堪了。

It's why I don't have some of the pleasures in life I used to have.” 'How do we do that? The ideal tool, he said, is what he calls 'a site battle'. This is where you choose a place that symbolises the wider struggle, and begin a non-violent fight there. An obvious example is Rosa Parks taking her seat on a bus in Montgomery, Alabama.

这就是为什么我不再拥有以前生活中的一些乐趣。” '我们该怎么做呢？他说，理想的工具就是他所说的“场地战”。在这里，你选择一个象征更广泛斗争的地方，并在那里开始一场非暴力斗争。一个明显的例子是罗莎·帕克斯（Rosa Parks）在阿拉巴马州蒙哥马利市的一辆公交车上就座。

Think, he said, about how we did it with coal. Man-made global warming is a rapidly unfolding disaster, but – like our attention crisis – it can easily seem pretty abstract, and far away, and hard to get a handle on.

他说，想想我们是如何用煤炭做到这一点的。人为造成的全球变暖是一场迅速蔓延的灾难，但就像我们的注意力危机一样，它很容易显得非

常抽象、遥远且难以掌握。

Even once you do understand it, it can seem so huge and overwhelming that you are often left feeling powerless to do anything.

即使你真正理解了它，它也会显得如此巨大和令人难以承受，以至于你常常感到无能为力。

When Ben first drew up his plans, there was a coal-fired power station in Britain named Kingsnorth, and the government was planning to authorise the construction of another coal station right next to it. This, Ben realised, was the whole global problem in microcosm.

当本第一次制定计划时，英国有一座名为金斯诺斯的燃煤电站，政府正计划授权在其旁边建造另一个燃煤电站。本意识到，这是整个全球问题的缩影。

So after a lot of planning, with his allies, he broke into the power station and abseiled down its side, painting a warning about the extreme weather events that coal unleashes across the world onto the side of the building.

因此，在与盟友进行了大量计划之后，他闯入了发电站，并从其一侧沿绳索下降，并在建筑物的一侧画上了关于煤炭在世界各地引发的极端天气事件的警告。

They were all arrested and put on trial – which was part of their plan. They intended to use the justice process – in a ju-jitsu move – as a perfect opportunity to put coal itself on trial.

他们都被逮捕并接受审判——这是他们计划的一部分。他们打算利用司法程序——以柔术的方式——作为对煤炭本身进行审判的绝佳机会。

They called some of the leading scientific experts from all over the world to testify, to explain what the burning of coal is doing to the ecosystem.

他们召集了来自世界各地的一些顶尖科学专家作证，解释煤炭燃烧对生态系统的影响。

In Britain there's a law that says that in an emergency, you can break

some rules – you don't get charged with trespassing, for example, if you break into a burning building to save people.

英国有一项法律规定，在紧急情况下，你可以违反一些规则——例如，如果你闯入燃烧的建筑物来救人，你不会被指控非法侵入。

Ben and his legal team argued that this was an emergency: they were trying to prevent the planet being set on fire. Twelve ordinary British jurors considered the facts – and they acquitted Ben and the other activists on all counts.

本和他的法律团队辩称，这是紧急情况：他们试图防止地球着火。十二名普通英国陪审员考虑了事实，最终宣判本和其他活动人士无罪。

It was a sensational story, reported all over the world. In the wake of the negative publicity around coal that emerged out of the trial, the British government abandoned all plans to build new coal-powered stations – and began to shutter the ones that remain.

这是一个轰动一时的故事，全世界都报道过。在试验中出现有关煤炭的负面报道后，英国政府放弃了建造新燃煤发电站的所有计划，并开始关闭剩余的发电站。

Ben explained that a site battle makes it possible to 'tell the story about the wider problem', and when you do this, 'it speeds up the national conversation' by waking up a lot of people to what's really going on. For this first stage, Ben said, 'You don't need millions of people.'

本解释说，现场之战可以“讲述更广泛问题的故事”，当你这样做时，“它可以唤醒很多人了解到底发生了什么，从而加速全国性的对话”。对于第一阶段，本说，“你不需要数百万人。

You need a small group of people that get [what] the problems [are], and know about creative confrontation – to create drama around it, to begin the consciousness-raising ... You capture people's attention, and then enough people feel that it's a vital issue that they want to give their time and their energy [to], and that there's a clear direction.'

你需要一小群人来了解问题是什么，并了解创造性的对抗——围绕它创造戏剧，开始提高意识……你吸引了人们的注意力，然后足够多的人觉得这是一个他们希望为此投入时间和精力，并且有明确的方向。

So Ben asked – should people be surrounding Facebook HQ? Twitter? What's the site battle here? What's the issue we start on? This is something activists need to debate and decide on. As I write this, I know one group is considering projecting a video of Holocaust survivors talking about the dangers of super-charging far-right ideas onto the side of Facebook's HQ. Ben stressed that site battles alone don't deliver victory – what they do is establish the crisis clearly in the public's mind, and draw more people into a movement, so they can begin to fight at many different levels and in many different ways.

于是本问——人们应该围在 Facebook 总部周围吗？推特？这里的地盘战是怎样的？我们从什么问题开始？这是活动人士需要辩论和决定的事情。当我写这篇文章时，我知道有一个团体正在考虑在 Facebook 总部的一侧播放一段大屠杀幸存者的视频，讲述极右翼思想的危险。本强调，仅靠现场战斗并不能带来胜利——他们所做的只是在公众心中清楚地确立危机，并吸引更多的人参与运动，这样他们就可以开始在许多不同层面、以多种不同方式进行战斗。

On attention, Ben said, a site battle is an opportunity to explain to people this is a fight 'about personal liberation' – about 'liberating ourselves from people who are controlling our minds without our consent'.

关于注意力，本说，现场之战是一个向人们解释这是一场“关于个人解放”的斗争的机会——关于“将我们自己从未经我们同意控制我们思想的人中解放出来”。

That is 'something that people can coalesce around – and it's highly motivating as well'. That then becomes a movement millions of people can join. Their participation after that will take many forms. Some of it will be inside the political system, organising within political parties, or lobbying the government.

这是“人们可以团结起来的事情——而且 also 具有很强的激励性”。然后，这将成为数百万人可以加入的运动。此后他们的参与将采取多种形式。其中一些将在政治体系内部、在政党内组织或游说政府。

Some of it will continue to be outside the political system, with direct action and persuading other citizens. To succeed, you need both.

其中一些将继续游离于政治体系之外，采取直接行动并说服其他公

民。要成功，两者都需要。

As I talked with Ben, I wondered if a movement to achieve these goals should be named Attention Rebellion. He smiled when I suggested it. 'It is an attention rebellion,' he said. I realised this requires a shift in how we think about ourselves. We are not medieval peasants begging at the court of King Zuckerberg for crumbs of attention. We are the free citizens of democracies, and we own our own minds and our own society, and together, we are going to take them back.

当我与本交谈时，我想知道实现这些目标的运动是否应该被命名为“注意力反叛”。当我提出这个建议时，他笑了。“这是一种注意力的反叛，”他说。我意识到这需要我们改变对自己的看法。我们不是中世纪的农民，在扎克伯格国王的宫廷里乞求一点关注。我们是民主国家的自由公民，我们拥有自己的思想和自己的社会，我们将共同把它们夺回来。

At times it seemed to me that this would be a hard movement to get off the ground – but then I remembered that all the movements that have changed your life and my life were hard to get off the ground.

有时在我看来，这将是一项很难起步的运动——但后来我想起，所有改变你和我生活的运动都很难起步。

For example, when gay people first started organising in the 1890s, they could be put in prison just for saying who they loved. When labour unions started fighting for the weekend, they were beaten by the police and their leaders were shot or hanged.

例如，当同性恋者在 1890 年代第一次开始组织起来时，他们可能会因为说出自己爱的人而被关进监狱。当工会开始为周末而战时，他们遭到警察的殴打，他们的领导人被枪杀或绞死。

What we face is, in many ways, vastly less challenging than the cliff they had to scale. They didn't give up. Often, when a person argues for social change, they are called 'naive'. The exact opposite is the truth.

从很多方面来说，我们所面临的挑战远不如他们必须攀登的悬崖那么具有挑战性。他们没有放弃。通常，当一个人主张社会变革时，他们会被称为“天真”。事实恰恰相反。

It's naive to think we as citizens can do nothing, and leave the powerful to do whatever they want, and somehow our attention will survive. There's nothing naive about believing that concerted democratic campaigning can change the world. As the anthropologist Margaret Mead said, it's the only thing that ever has.

认为我们作为公民无能为力，让有权势的人为所欲为，而我们的注意力会以某种方式保存下来，这是天真的想法。相信协调一致的民主运动能够改变世界并不是天真的想法。正如人类学家玛格丽特·米德所说，这是唯一拥有过的东西。

I realised that we have to decide now: do we value attention and focus? Does being able to think deeply matter to us? Do we want it for our children? If we do, then we have to fight for it. As one politician said – you don't get what you don't fight for.

我意识到我们现在必须做出决定：我们重视关注和专注吗？能够深入思考对我们来说重要吗？我们想要给我们的孩子吗？如果我们这样做了，那么我们就必须为之奋斗。正如一位政客所说——不奋斗就得不到什么。



Even as it became clearer to me what we need to do now, there were some unresolved thoughts that kept nagging at me.

尽管我越来越清楚我们现在需要做什么，但仍有一些未解决的想法一直困扰着我。

Lying beneath so many of the causes of this crisis that I had learned about, there seemed to be one big cause – but I was reluctant to reckon with it because it is so big, and, to be honest, I hesitate to write about it now, in case it daunts you too. Back in Denmark, Sune Lehmann had shown me the evidence that the world is speeding up, and that process is shrinking our collective attention span. He showed that social media is a major accelerant. But he made it clear that this has been happening for a very long time.

在我了解到的这场危机的众多原因之下，似乎有一个重大原因——但我不愿意考虑它，因为它太大了，而且说实话，我犹豫是否要写它现在，以防它也让你感到畏惧。回到丹麦，苏内·莱曼（Sune Lehmann）向我展示了世界正在加速发展的证据，而这一过程正在缩短我们的集体注意

力范围。他表明社交媒体是主要的促进剂。但他明确表示，这种情况已经发生很长时间了。

His study started analysing data from the 1880s, and it showed that every decade since, the way we experience the world has been getting faster, and we have been focusing on any one topic less and less.

他的研究从 1880 年代开始分析数据，结果表明，从那以后的每十年，我们体验世界的方式都变得越来越快，我们对任何一个主题的关注也越来越少。

I kept puzzling away at this question. Why? Why has this been happening so long? This trend far precedes Facebook, or most of the factors I have written about here. What's the underlying cause stretching back to the 1880s? I discussed it with many people, and the most persuasive answer came from the Norwegian scientist Thomas Hylland Eriksen, who is a professor of social anthropology. Ever since the Industrial Revolution, he said, our economies have been built around a new and radical idea – economic growth. This is the belief that every year, the economy – and each individual company in it – should get bigger and bigger. That's how we now define success. If a country's economy grows, its politicians are likely to be reelected.

我一直对这个问题百思不得其解。为什么？为什么这种情况发生了这么久？这种趋势远远早于 Facebook，或者说我在这里所写的大多数因素。追溯到 1880 年代的根本原因是什么？我和很多人讨论过这个问题，最有说服力的答案来自挪威社会人类学教授托马斯·海兰·埃里克森（Thomas Hylland Eriksen）。他说，自工业革命以来，我们的经济一直围绕着一一种新的激进理念——经济增长——建立。人们相信，经济——以及经济中的每一家公司——每年都应该变得越来越大。这就是我们现在定义成功的方式。如果一个国家的经济增长，其政治家就有可能连任。

If a company grows, its CEOs are likely garlanded. If a country's economy or a company's share price shrinks, politicians or CEOs face a greater risk of being booted out. Economic growth is the central organising principle of our society.

如果一家公司不断发展，其首席执行官很可能会受到嘉奖。如果一个国家的经济或一家公司的股价萎缩，政客或首席执行官面临更大的被赶出的风险。经济增长是我们社会的中心组织原则。

It is at the heart of how we see the world.

它是我们如何看待世界的核心。

Thomas explained that growth can happen in one of two ways. The first is that a corporation can find new markets – by inventing something new, or exporting something to a part of the world that doesn't have it yet. The second is that a corporation can persuade existing consumers to consume more. If you can get people to eat more, or to sleep less, then you have found a source of economic growth. Mostly, he believes, we achieve growth today primarily through this second option. Corporations are constantly finding ways to cram more stuff into the same amount of time. To give one example: they want you to watch TV *and* follow the show on social media. Then you see twice as many ads. This inevitably speeds up life. If the economy has to grow every year, in the absence of new markets it has to get you and me to do more and more in the same amount of time.

托马斯解释说，增长可以通过以下两种方式之一发生。首先，公司可以通过发明新产品或向世界上尚无新产品的地区出口新产品来寻找新市场。第二是企业可以说服现有消费者增加消费。如果你能让人们多吃一点，或者少睡一点，那么你就找到了经济增长的源泉。他认为，我们今天主要通过第二种选择实现增长。公司不断寻找方法在相同的时间内塞满更多的东西。举一个例子：他们希望你看电视并在社交媒体上关注节目。然后你看到的广告数量是原来的两倍。这不可避免地加快了生活的速度。如果经济必须每年增长，在缺乏新市场的情况下，它必须让你和我在相同的时间内做越来越多的事情。

As I read Thomas's work more deeply, I realised this is one of the crucial reasons why life has accelerated every decade since the 1880s: we are living in an economic machine that requires greater speed to keep going – and that inevitably degrades our attention over time.

当我更深入地阅读托马斯的作品时，我意识到这是自 1880 年代以来生活每十年都加速发展的关键原因之一：我们生活在一台需要更快速度才能继续运转的经济机器中，而随着时间的推移，这不可避免地会降低我们的注意力。

In fact, when I reflected on it, this need for economic growth seemed to be the underlying force that was driving so many of the causes of

poor attention that I had learned about – our increasing stress, our swelling work hours, our more invasive technologies, our lack of sleep, our bad diets.

事实上，当我反思时，这种对经济增长的需求似乎是导致我所了解到的许多注意力不集中的原因的潜在力量——我们日益增加的压力、我们不断增加的工作时间、我们更具侵入性的技术、我们睡眠不足、饮食不良。

I thought about what Dr Charles Czeisler had told me back at Harvard Medical School. If we all went back to sleeping as much as our brains and our bodies need, he said, ‘It would be an earthquake for our economic system, because our economic system has become dependent on sleep-depriving people.

我想起了查尔斯·蔡斯勒博士在哈佛医学院时告诉我的话。他说，如果我们都回到大脑和身体所需的睡眠时间，“这对我们的经济体系来说将是一场地震，因为我们的经济体系已经变得依赖于睡眠不足的人。”

The attentional failures are just roadkill. That’s just the cost of doing business.’ This is true of sleep – and it’s true of much more than sleep.

注意力不集中只会造成交通事故。这只是做生意的成本。”这对于睡眠来说是正确的——而且对于睡眠以外的其他事情也是如此。

It was intimidating to realise that something so deeply ingrained in our way of life is – over time – an acid on our attention. But I already knew we don’t have to live like this. My friend Dr Jason Hickel, who is an economic anthropologist at the University of London, is perhaps the leading critic of the concept of economic growth in the world – and he has been explaining for a long time that there is an alternative.

意识到这种在我们生活方式中根深蒂固的东西随着时间的推移会侵蚀我们的注意力，这真是令人恐惧。但我已经知道我们不必这样生活。我的朋友杰森·希克尔博士是伦敦大学的经济人类学家，他也许是世界上经济增长概念的主要批评者——他长期以来一直在解释还有另一种选择。

When I went to see him, he explained that we need to move beyond the idea of growth to something called a ‘steady-state economy’. We would abandon economic growth as the driving principle of the economy and instead choose a different set of goals. At the moment we think we’re prosperous if we are working ourselves ragged to buy

things – most of which don't even make us happy.

当我去见他时，他解释说我们需要超越增长的概念，转向所谓的“稳态经济”。我们将放弃经济增长作为经济的驱动原则，转而选择一套不同的目标。目前，我们认为，如果我们衣衫褴褛地工作去买东西，我们就很富裕了——其中大多数甚至不能让我们快乐。

He said we could redefine prosperity to mean having time to spend with our children, or to be in nature, or to sleep, or to dream, or to have secure work. Most people don't want a fast life – they want a good life.

他说，我们可以重新定义繁荣，意味着有时间与我们的孩子一起度过，或者在大自然中，或者睡觉，或者做梦，或者有稳定的工作。大多数人不想要快节奏的生活——他们想要美好的生活。

Nobody lies on their deathbed and thinks about all that they contributed to economic growth. A steady-state economy can allow us to choose goals that don't raid our attention, and don't raid the planet's resources.

没有人在临终时会想起自己为经济增长所做的贡献。稳态经济可以让我们选择不占用我们注意力、不占用地球资源的目标。

As Jason and I talked, in a public park in London in the middle of the Covid-19 crisis, I looked around us, where people were sitting in the middle of a workday under the trees, enjoying nature. This was, I realised, the only time in my life the world had truly slowed down.

正如 Jason 和我在 Covid-19 危机期间在伦敦的一个公园里谈话时，我环顾四周，人们正坐在树下享受大自然，度过了一天的工作日。我意识到，这是我一生中唯一一次世界真正放慢了脚步。

A terrible tragedy had forced us to do it – but there was also, for many of us, a hint of relief. It was the first time in centuries that the world chose, together, to stop racing, and pause. We decided as a society to value something other than speed and growth.

一场可怕的悲剧迫使我们这样做——但对我们许多人来说，这也让我们松了一口气。这是几个世纪以来世界第一次共同选择停止比赛并暂停。作为一个社会，我们决定重视速度和增长以外的其他东西。

We literally looked up and saw the trees.

我们确实抬头看到了树木。

I suspect that, in the long run, it will be ultimately not be possible to rescue attention and focus in a world that is dominated by the belief that we need to keep growing and speeding up every year.

我怀疑，从长远来看，在一个被“我们需要每年不断增长和加速”的信念所主导的世界中，最终不可能挽救人们的注意力和焦点。

I can't tell you I have all the answers to how we do that – but I believe that if an Attention Rebellion begins, we will, sooner or later, have to take on this very deep issue: the growth machine itself.

我不能告诉你我知道我们如何做到这一点的所有答案 - 但我相信，如果注意力叛乱开始，我们迟早必须解决这个非常深刻的问题：增长机器本身。

But we will have to do this in any event – for another reason. The growth machine has pushed humans beyond the limits of our minds – but it is also pushing the planet beyond its ecological limits. And these two crises, I was coming to believe, are intertwined.

但无论如何我们都必须这样做——出于另一个原因。生长机器已经推动人类超越了我们的思维极限，但它也推动了地球超越了其生态极限。我开始相信，这两场危机是交织在一起的。



There is one particularly large reason why we need an Attention Rebellion today. It's stark. Human beings have never needed our ability to focus – our superpower as a species – more than we do at this moment, because we face an unprecedented crisis.

今天我们需要一场注意力叛乱有一个特别重要的原因。很明显。人类从来没有像现在这样需要我们的专注能力——我们作为一个物种的超能力——因为我们面临着前所未有的危机。

As I write these words, I am looking at a webcam of San Francisco, showing the streets where I walked with Tristan Harris. He told me there – just over a year before – that his biggest worry about the

destruction of our attention is that it will prevent us from dealing with global warming.

当我写下这些文字时，我正在看着旧金山的网络摄像头，显示我和特里斯坦·哈里斯走过的街道。一年多前，他在那里告诉我，他对我们注意力的破坏最大的担忧是，这会阻止我们应对全球变暖。

Right now, on those streets, it's midday, but you can't see the sun – it has been blacked out by ash from the massive wildfires ripping across California. One in every thirty-three acres in the state has burned. The house Tristan grew up in, not far away, has been consumed by the flames, and most of his belongings have been destroyed. The streets where I had this conversation about the climate crisis with him have ash flecked across them, and the sky is glowing a low, dark orange.

现在，在那些街道上，已经是中午了，但你看不到太阳——它已经被席卷加州的大规模野火的灰烬遮蔽了。该州每三十三英亩土地中就有一英亩被烧毁。不远处特里斯坦长大的房子已经被大火烧毁，他的大部分财产都被毁了。我与他谈论气候危机的街道上布满了灰烬，天空泛着低沉的深橙色光芒。

The three years I worked on this book have been years of fire. Several of the cities I spent time in have been choked by the smoke from huge and unprecedented wildfires – Sydney, Sao Paulo and San Francisco.

我写这本书的三年是如火如荼的三年。我待过的几个城市——悉尼、圣保罗和旧金山——都被史无前例的巨大野火产生的烟雾所窒息。

Like a lot of people, I read about the fires, but only a little – I began to feel quickly overwhelmed. The moment when it became real to me – when I felt it in my gut – was a moment that might seem small when I describe it.

像很多人一样，我读到了有关火灾的信息，但只读了一点——我很快就感到不知所措。当它对我来说变得真实的那一刻——当我在内心感受到它时——当我描述它时，这个时刻可能显得微不足道。

Starting in 2019, Australia experienced what became known as its Black Summer, a series of wildfires so vast that they are hard to describe. Three billion animals had to flee or were burned to death, and so many species were lost that Professor Kingsley Dixon, a

botanist, called it a 'biological Armageddon'. Some Australians had to huddle on the beaches, surrounded by a ring of flames, as they wondered if they should try to scramble onto boats to escape. They could hear the fires getting closer.

从 2019 年开始，澳大利亚经历了所谓的“黑色夏天”，一系列野火规模之大，难以描述。三十亿只动物不得不逃离或被烧死，如此多的物种消失，植物学家金斯利·迪克森教授将其称为“生物世界末日”。一些澳大利亚人不得不挤在海滩上，被火圈包围，因为他们不知道是否应该尝试爬上船逃生。他们可以听到火势越来越近。

It sounded like a raging waterfall, witnesses said, and it was broken only by the sound of bottles smashing as their houses burned up, one by one. The smoke from the fires was visible 1,200 miles away in New Zealand, where the skies over the South Island turned orange.

目击者称，声音听起来就像汹涌的瀑布，只有随着他们的房子一一被烧毁，瓶子破碎的声音才将瀑布打破。1200 英里外的新西兰，大火产生的烟雾清晰可见，南岛的天空变成了橙色。

About three weeks or so into the fires, I was on the phone to a friend in Sydney when I heard a loud shrieking sound. It was the fire alarm in his apartment. All over the city, in offices and homes, these alarms had started to sound. This was because there was so much smoke in the air travelling in from the wildfires that the smoke alarms believed each individual building was on fire. This meant that one by one, many people in Sydney turned off their smoke alarms, and they sat in the silence and the smoke.

火灾发生大约三周后，我正在给悉尼的一位朋友打电话，突然听到一声巨大的尖叫声。这是他公寓的火警警报。整个城市，在办公室和家庭，这些警报已经开始响起。这是因为空气中从野火中散发出大量烟雾，烟雾警报器认为每栋建筑物都着火了。这意味着悉尼的许多人都一一关掉了烟雾警报器，他们坐在寂静和烟雾中。

I only realised why I found this so disturbing when I talked it over with my friend Bruno Giussani, a Swiss writer.

当我和我的瑞士作家朋友布鲁诺·朱萨尼（Bruno Giussani）谈论这个问题时，我才意识到为什么我觉得这如此令人不安。

He said to me that they were turning off the warning systems in our homes that are designed to protect us, because the bigger warning systems that are meant to protect us all – our society's ability to focus on what scientists are telling us, and act on what they say – are not working.

他对我说，他们正在关闭我们家中旨在保护我们的警报系统，因为更大的警报系统旨在保护我们所有人——我们的社会有能力关注科学家告诉我们的内容，并采取行动他们所说的——不起作用。

The climate crisis can be solved. We need to rapidly transition away from fossil fuels and towards powering our societies by clean, green sources of energy. But to do that we will need to be able to focus, to have sane conversations with each other, and to think clearly.

气候危机是可以解决的。我们需要迅速摆脱化石燃料，转向通过清洁、绿色能源为我们的社会提供动力。但要做到这一点，我们需要能够集中注意力，彼此进行理智的对话，并清晰地思考。

These solutions are not going to be achieved by an addled population who are switching tasks every three minutes and screaming at each other all the time in algorithm-pumped fury. We can only solve the climate crisis if we solve our attention crisis.

这些解决方案不可能通过那些每三分钟就切换一次任务并在算法激发的愤怒中互相尖叫的混乱人群来实现。只有解决了我们的注意力危机，我们才能解决气候危机。

As I contemplated this, I began to think again about something that James Williams wrote: 'I used to think there were no great political struggles left ... How wrong I was. The liberation of human attention may be the defining moral and political struggle of our time.

当我思考这一点时，我开始再次思考詹姆斯·威廉姆斯所写的一句话：“我曾经认为已经不存在伟大的政治斗争了……我错了。”人类注意力的解放可能是我们这个时代决定性的道德和政治斗争。

Its success is the prerequisite for the success of virtually all other struggles.'

它的成功是几乎所有其他斗争成功的先决条件。”

When I look now at the orange, fire-scarred skies over San Francisco on this grainy webcam, I keep thinking about the light in Provincetown in the summer I spent there without my phone or the internet, and how pure and perfect it seemed.

当我现在通过这个颗粒状的网络摄像头看着旧金山上空橙色、火烧伤的天空时，我不断地想起我在没有手机或互联网的情况下度过的夏天普罗温斯敦的光线，以及它看起来是多么纯净和完美。

James Williams was right: our attention is a kind of light, one that clarifies the world and makes it visible to us. In Provincetown I could see more clearly than I ever had before in my life – my own thoughts, my own goals, my own dreams. I want to live in that light – the light of knowing, of achieving our ambitions, of being fully alive – and not in the menacing orange light of it all burning down.

詹姆斯·威廉姆斯是对的：我们的注意力是一种光，它使世界变得清晰并让我们可见。在普罗温斯敦，我可以比以前更清楚地看到我自己的想法、我自己的目标、我自己的梦想。我想生活在那样的光中——认知的光、实现我们的抱负的光、充满活力的光——而不是在一切都燃烧殆尽的危险的橙色光中。

When I hung up on my friend in Sydney so he could unscrew his fire alarm and switch it off, I thought – if our attention continues to shatter, the ecosystem won't wait patiently for us to regain our focus. It will fall and it will burn.

当我挂断悉尼朋友的电话，让他拧开火警警报并将其关闭时，我想——如果我们的注意力继续分散，生态系统不会耐心等待我们重新集中注意力。它会掉落并且会燃烧。

At the start of the Second World War, the English poet W. H. Auden – when he looked out over the new technologies of destruction that had been created by humans – warned: ‘We must love one another, or die.’ I believe that now we must focus together – or face the fires alone.

第二次世界大战开始时，英国诗人 W. H. 奥登在展望人类创造的新技术破坏性时警告说：“我们必须彼此相爱，否则就会死亡。”我相信现在我们必须齐心协力，否则独自面对大火。

Groups Already Fighting to Improve Attention

团体已经在努力提高注意力

The fight to heal and restore our attention has already begun. This is a list of groups you can join today who have begun the work. It's an early and provisional index – I believe more groups will be formed as we become more informed about the attention crisis.

治愈和恢复我们注意力的斗争已经开始。这是您今天可以加入的已开始工作的小组列表。这是一个早期的临时指数——我相信，随着我们对注意力危机的了解越来越多，将会形成更多的团体。

If there isn't a group doing what you believe needs to be done, set it up and email me at chasingthescream@gmail.com and I'll add it to the book's website and to future editions of this book.

如果没有一个小组在做你认为需要做的事情，请建立一个小组并向我发送电子邮件至 chasingthescream@gmail.com，我会将其添加到本书的网站以及本书的未来版本中。

On fighting to change how the internet works

努力改变互联网的运作方式

Center for Humane Technology: <https://www.humanetech.com>

人道技术中心： <https://www.humanetech.com>

The Avaaz campaign to detoxify the algorithms: https://secure.avaaz.org/campaign/en/detox_the_algorithm_loc/

Avaaz 算法解毒活动： https://secure.avaaz.org/campaign/en/detox_the_algorithm_loc/

Stop Hate For Profit: <https://www.stophateforprofit.org/backup-week-of-action-toolkit>

停止仇恨以获取利润： <https://www.stophateforprofit.org/backup-week-of-action-toolkit>

On fighting for a four-day week

为一周工作四天而奋斗

Andrew Barnes and Charlotte Lockhart have co-founded this group: www.4dayweek.com

安德鲁·巴恩斯 (Andrew Barnes) 和夏洛特·洛克哈特 (Charlotte Lockhart) 共同创立了该小组： www.4dayweek.com

In Europe, the New Economics Foundation is fighting for this: <https://neweconomics.org/campaigns/euro-working-time>

在欧洲，新经济基金会正在为此奋斗： <https://neweconomics.org/campaigns/euro-working-time>

Four Day Week Ireland: <https://fourdayweek.ie>

爱尔兰四天周： <https://fourdayweek.ie>

On children being allowed to play

关于允许孩子玩耍

Let Grow: <https://letgrow.org>

让成长： <https://letgrow.org>

Let Our Kids Be Kids: letthekidsbekids.wordpress.com

让我们的孩子成为孩子： letthekidsbekids.wordpress.com

The Daily Mile: www.thedailymile.co.uk

每日一英里： www.thedailymile.co.uk

The Less Testing, More Learning Campaign: <https://www.citizensforpublicschools.org/less-testing-more-learning-ma-campaign/sign-the-less-testing-more-learning-petition-today/>

少测试，多学习活动： <https://www.citizensforpublicschools.org/less-testing-more-learning-ma-campaign/sign-the-less-testing->

more-learning-petition-today/

More Than A Score (opposing over-testing in the UK):
www.morethanascore.org.uk and www.facebook.com/parentssupportteachers/

More Than A Score (反对英国过度测试) :
www.morethanascore.org.uk 和 www.facebook.com/parentssupportteachers/

Keeping Early Years Unique: <https://www.keyu.co.uk>

保持早年的独特性 : <https://www.keyu.co.uk>

Upstart Scotland: www.upstart.scot

苏格兰新贵 : www.upstart.scot

On protecting kids from getting hooked to tech when they are young

关于保护孩子在年轻时不沉迷于科技

Turning Life On: <https://www.turninglifeon.org>

开启生活 : <https://www.turninglifeon.org>

On changing our food supply

关于改变我们的食物供应

Alliance for a Healthier Generation: www.healthiergeneration.org

健康一代联盟 : [www.healthier Generation.org](http://www.healthiergeneration.org)

Healthy Food America: www.healthyfoodamerica.org

美国健康食品 : www.healthyfoodamerica.org

Healthy Schools Campaign: <https://healthyschoolscampaign.org/issues/school-food/>

健康学校运动 : <https://healthyschoolscampaign.org/issues/school-food/>

Better Food Britain, and the Children's Food Campaign: <https://www.sustainweb.org/projectsandcampaigns/> and <https://www.sustainweb.org/childrensfoodcampaign/>

英国更好食品和儿童食品运动： <https://www.sustainweb.org/projectsandcampaigns/> 和 <https://www.sustainweb.org/childrensfoodcampaign/>

School Food Matters: <https://www.schoolfoodmatters.org/campaigns>

学校食物很重要： <https://www.schoolfoodmatters.org/campaigns>

Henry: www.henry.org.uk

亨利： www.henry.org.uk

On resisting pollutants that can damage attention

关于抵抗可能损害注意力的污染物

Little Things Matter: <https://littlethingsmatter.ca>

小事很重要： <https://littlethingsmatter.ca>

Client Earth: <https://www.clientearth.org>

客户端地球： <https://www.clientearth.org>

The BreatheLife campaign: <https://www.ccacoalition.org/en/activity/breathelife-campaign> or <https://breathelife2030.org>

生命呼吸活动： <https://www.ccacoalition.org/en/activity/breathelife-campaign> 或 <https://breathelife2030.org>

HealthyAir: <https://www.healthyair.org.uk>

Endocrine Society (ES): <https://www.endocrine.org/>

内分泌学会（ES）： <https://www.endocrine.org/>

European Society of Endocrinology (ESE): <https://www.es-hormones.org/>

欧洲内分泌学会 (ESE)： <https://www.es-hormones.org/>

Health and Environmental Alliance (HEAL): <https://www.env-health.org/>

健康与环境联盟 (HEAL)： <https://www.env-health.org/>

On a universal basic income

关于全民基本收入

Citizen's Basic Income Trust: <https://citizensincome.org>

公民基本收入信托： <https://citizensvenue.org>

Basic Income: <https://www.basicincome.org.uk>

基本收入： <https://www.basicvenue.org.uk>



If you'd like to be very occasionally kept up to date on developments in the movement to reclaim our attention by me, you can sign up to my mailing list: www.stolenfocusbook.com/mailling-list

如果您想偶尔了解我引起我们注意的运动的最新进展，您可以注册我的邮件列表：www.stolenfocusbook.com/mailling-list

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The social sciences have been having a rough time lately, but they are an essential tool for how we understand the world, and I'm really grateful to them.

社会科学最近经历了一段艰难的时期，但它们是我们理解世界的重要工具，我真的很感激它们。

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transcripts contact them at CLKtranscripts@gmail.com

我的转录全部由 CLK Transcription 团队完成 - 感谢 CarolLee 和那里的每个人。如果您需要好的成绩单，请通过 CLKtranscripts@gmail.com 与他们联系

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To find out more about my Patreon – and get regular updates on what I'm working on next – go to <https://www.patreon.com/johannhari>.

要了解有关我的 Patreon 的更多信息，并定期获取我下一步工作的最新信息，请访问 <https://www.patreon.com/johannhari>。

Any errors in this book are entirely mine. If you spot anything that you think might be wrong, please do reach out to me so I can correct it on the website and in future editions of the book at chasingthescream@gmail.com. To see any corrections I've already issued go to www.stolenfocusbook.com/corrections

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Notes

笔记

Please note these are partial endnotes. There are more references, background, and extra explanatory material – as well as audio of the quotes in the book – at www.stolenfocusbook.com/additional-endnotes/

请注意这些是部分尾注。更多参考资料、背景和额外的解释材料，以及书中引用的音频，请访问 www.stolenfocusbook.com/additional-endnotes/

Introduction

介绍

here For example, a small study investigated how often an average American college student: Jill Twenge, *iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy – and Completely Unprepared for Adulthood – and What That Means for the Rest of Us* (New York: Atria Books, 2017), p. 64, citing L. Yeykelis, J. J. Cummings and B. Reeves, 'Multitasking on a Single Device: Arousal and the Frequency, Anticipation, and Prediction of Switching Between Media Content on a Computer', *Journal of Communications*, 64, 2014, pp. 167–92. DOI:10.1111/jcom.12070

例如，一项小型研究调查了普通美国大学生的频率：Jill Twenge, *iGen：为什么当今超级互联的孩子在成长过程中变得不那么叛逆，更加宽容，不那么快乐 - 并且完全没有为成年做好准备 - 以及这意味着什么我们其余的人*（纽约：Atria Books，2017），第17页64，引用 L. Yeykelis、J. J. Cummings 和 B. Reeves，“单

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See also Adam Gazzaley and Harry D. Rosen, *The Distracted Mind: Ancient Brains in a High-Tech World* (Cambridge: MIT Press, 2017), pp. 165–7.

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here A different study by Gloria Mark, professor of infomatics at the University of California, Irvine: V. M. Gonzalez and G. Mark, ‘Constant, constant, multitasking craziness: Managing multiple working spheres’, in *Proceedings of CHI 2004*, Vienna, Austria, pp. 113–120. Professor Marks described this in this interview with *Business Journal*, and elucidated further in my subsequent interview with her years later.

加州大学欧文分校信息学教授 Gloria Mark 进行的另一项研究：V. M. Gonzalez 和 G. Mark，“持续不断的多任务疯狂：管理多个工作领域”，2004 年奥地利维也纳 CHI 会议记录，第 113–120 页。马克斯教授在《商业杂志》的采访中描述了这一点，并在多年后我对她的采访中进一步阐述了这一点。

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“工作中断太多？”，《商业杂志》，2006 年 6 月 8 日。
<https://news.gallup.com/businessjournal/23146/too-many-interruptions-work.aspx>

See also C. Marci, ‘A (biometric) day in the life: Engaging across media’, paper presented at Re:Think 2012, New York, NY, 28 March 2012.

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For a study with similar (not identical) results, see: L. D. Rosen et al., ‘Facebook and texting made me do it: Media-

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对于具有类似（不相同）结果的研究，请参阅：L. D. Rosen 等人，“Facebook 和短信让我做到了：学习时媒体引发的任务切换”，*人类行为中的计算机*，29 (3)，2013，第 948–58 页。

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另请参见 L. Dabbish、G. Mark 和 V. Gonzalez，“为什么我总是打断自己？”环境、习惯和自我干扰”，载于 2011 年计算系统中人为因素年度会议记录，第 3,127-30 页。

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Chapter One

第一章

here nothing can be changed until it is faced: D. Charles William, *Forever a Father, Always a Son* (New York: Victor Books, 1991), p. 112.

在此，除非面对它，否则一切都无法改变：D. Charles William，《永远是父亲，永远是儿子》（纽约：Victor Books，1991），第 14 页。112.

here For the average American, it’s three hours and fifteen minutes: J. MacKay, ‘Screen time stats 2019: here’s how much you use your phone during the work day’, *RescueTime* (blog), 21 March 2019. <https://blog.rescuetime.com/screen-time-stats-2018/>

对于普通美国人来说，这是 3 小时 15 分钟：J. MacKay，“2019 年屏幕时间统计：这是您在工作日使用手机的时间”，*RescueTime*（博客），2019 年 3 月 21 日。<https://blog.rescuetime.com/screen-time-stats-2018/>

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我们每 24 小时触摸手机 2,617 次：J. Naftulin，“这是我们每天触摸手

机的次数”，Insider，2016 年 7 月 13 日。<https://www.businessinsider.com/dscout-research-people-touch-cell-phones-2617-times-a-day-2016-7?r=US&IR=T>。

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Original: ‘*La vida no puede esperar a que las ciencias expliquen científicamente el Universo. No se puede vivir ad kalendas graecas. El atributo más esencial de la existencia es su perentoriedad: la vida es siempre urgente. Se vive aquí y ahora sin posible demora ni traspaso. La vida nos es disparada a quemarropa. Ya la cultura, que no es sino su interpretación, no puede tampoco esperar.*’ J. Ortega y Gasset, *Mission of the University (Misión de la Universidad)*, 1930, translated by H. L. Nostrand (Princeton, Princeton University Press, 1944), p. 73.

西班牙作家何塞·奥尔特加·伊·加塞特 (José Ortega y Gasset) 曾说过这样的话：原文：“*La vida no puede esperar a que las ciencias expliquen científicamente el Universo*”。没有*se puede vivir ad kalendas graecas*。El atributo más esencial de la Existencia es su perentoriedad: la vida es siempre eagere. Se vive aquí y ahora sin posible demora ni traspaso。La vida nos es disparada a quemarropa。Ya la cultura, que no es sino suterpretación, no puede tampoco esperar.’ J. Ortega y Gasset，《大学使命》(Misión de la Universidad)，1930 年，由 H. L. Nostrand 翻译（普林斯顿大学，普林斯顿大学出版社，1944 年），p. 73。

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第一个称为转换成本效应：转换成本在学术文献中非常牢固地确立。这是一个典型的例子：R. D. Rogers 和 S. Monsell, “简单认知任务之间可预测切换的成本”，《实验心理学杂志：综述》，124，1995，第 207-31 页。这也是一个很好的总结：“多任务处理：转换成本”，美国心理学会，2006 年 3 月 20 日。 <https://www.apa.org/research/action/multitask> [未给出作者]

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让您了解它有多大：James Williams, 《Stand Out Of Our Light》（剑桥：剑桥大学出版社，2018 年），第 14 页。69. 这项研究是格伦·威尔逊博士进行的。它没有出版，因为它是受一家私人公司委托的。如果您选择标有“Infomania”的部分，您可以在此链接阅读 Wilson 博士讨论该研究的内容：<http://drglennwilson.com/links.html>.

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Dr Wilson has been uncomfortable with how some journalists have written about this study, and I have tried to absorb his criticisms in the text here. He says that the comparison with cannabis is only true in the short term – in the longer term, cannabis may harm your IQ more. I have worded the sentence here to reflect this fact.

威尔逊博士对一些记者如何报道这项研究感到不安, 我试图在本文中吸收他的批评。他说, 与大麻的比较只在短期内是正确的——从长远来看, 大麻可能会更损害你的智商。我在这里用这句话来反映这一事实。

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<https://www.nbcnews.com/technolog/students-cant-resist-distraction-two-minutes-neither-can-you-1C9984270>。这项研究尚未发表。

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Chapter Two

第二章

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Chapter Three

第三章

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Chapter Five

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乔纳森还通过电子邮件补充道：“还需要注意的是，这些特征中的许多特征可能在那些能够控制自己何时走神的人身上最为明显（即当外部世界需要他们的注意力时可以避免这样做）。”

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他们得出的结论是：“徘徊的头脑是不快乐的头脑”：M. Killingsworth 和 D. Gilbert，“徘徊的头脑是不快乐的头脑”，《科学》，2010 年 11 月 12 日。另请参阅 Watson，《注意力》，第 15、70 页。

Chapter Six

第六章

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他相信，他们可以“比人类更持久，[并且]提供更大的匿名性”：B. J. Fogg, *Persuasive Technology* (旧金山：Morgan Kaufman, 2003)，第 7-8 页。

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他们问：“如果将来你有地球上每个人的个人资料怎么办？”：费里斯，“蒂姆·费里斯演出记录”。

here **‘I want you to imagine walking into a room. A control room, with a bunch of people, a hundred people...’:** T. Harris, ‘How a handful of tech companies control billions of minds every day’, TED talk, *TED2017*. https://www.ted.com/talks/tristan_harris_how_a_handful_of_tech_companies_control_billions_of_minds

这里‘我想让你想象一下走进一个房间。一个控制室，有一群人，一百个人……’：T. Harris，“少数科技公司如何每天控制数十亿人的思想”，TED 演讲，TED2017。 https://www.ted.com/talks/tristan_harris_how_a_handful_of_tech_companies_control_billions_of_minds
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Ferris, “蒂姆·费里斯演出记录”。

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这里“我失败了，因为公司[目前]没有正确的动力去改变”：T. Harris, 参议院商务委员会证词，2019 年 6 月 25 日。 <https://www.commerce.senate.gov/services/files/96E3A739-DC8D-45F1-87D7-EC70A368371D>.

here ‘I felt completely hopeless: P. Marsden, ‘Humane: A New Agenda for Tech’, *Digital Wellbeing*, 25 April 2019. <https://digitalwellbeing.org/humane-a-new-agenda-for-tech-speed-summary-and-video/>

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here ‘it’s about making us extra-human’: This is as recalled by Aza in his interview with me.

这里“是为了让我们变得非人类”：这是阿扎在接受我采访时回忆的。

here At a conservative estimate, infinite scroll makes you spend 50 percent more of your time: There’s a debate about the precise numbers for this, because it’s inherently hard to measure. One way of measuring it is what’s called ‘bounce rate’ (the number of people who arrive on a site and immediately leave without going to any other page on the website).

保守估计，无限滚动会让你多花 50% 的时间：关于具体数字存在争议，因为它本质上很难衡量。衡量它的一种方法是所谓的“跳出率”（到达某个网站并立即离开而不前往网站上任何其他页面的人数）。

For example, time.com's 'bounce rate' apparently dropped by 15 percent when they introduced infinite scroll in 2014; Quartz readers view about 50 percent more stories than they would without infinite scroll. Both of these figures come from S.

例如，time.com 在 2014 年推出无限滚动功能后，其“跳出率”明显下降了 15%；与没有无限滚动的情况相比，Quartz 读者看到的故事多了大约 50%。这两个数字均来自 S.

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他自己的孩子“不被允许使用那些狗屎”：Roger McNamee，*Zucked*：醒

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Paul Graham 写道: “除非产生这些东西的技术进步形式受到不同的法律约束: Nir Eyal, *Hooked: 如何构建习惯形成产品* (伦敦: Penguin, 2014 年), 第 14 页。11; P. Graham, “上瘾的加速”, Paul Graham (博客), 2010 年 7 月。 <http://www.paulgraham.com/addiction.html?viewfullsite=1>

Chapter Seven

第七章

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这被称为“消极偏见”：有关详细总结，请参阅 M. Jaworski，“消极偏见：为什么坏事会持续存在”，*PsyCom*，2020 年 2 月 19 日。
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here They are – according to the best site monitoring YouTube

trends – words such as ‘hates, obliterates, slams, destroys’: See algotransparency.org – this website tracks words that trend on YouTube.

根据监控 YouTube 趋势的最佳网站，它们是“仇恨、抹杀、猛烈、破坏”等词语：参见 algotransparency.org – 该网站跟踪 YouTube 上的流行词语。

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here Tristan told one interviewer, ‘It’s very hard to be with reality, the physical world, the built world’: Tristan said this to Decca Aitkenhead, the chief interviewer of the *Sunday Times*. She gave me the unpublished transcript of their full conversation, which helped to inform this part of the book.

特里斯坦在这里告诉一位采访者, “与现实、物质世界、建筑世界相处是非常困难的”: 特里斯坦对《星期日泰晤士报》的首席采访者德卡·艾特肯黑德说了这番话。她给了我他们未发表的完整谈话记录, 这有助于为本书的这一部分提供信息。

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第 621–36 页；D. DeSteno 等人，“超越可能性感知中的效价：情绪特异性的作用”，《人格与社会心理学杂志》，78 (3)，2000，第 397-416 页。

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在这里，您将显示“处理深度降低”：Litvak 等人，“火中之火”，第 14 页。299.

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在 2016 年美国总统选举期间，Facebook 上的彻头彻尾的谎言超过了 19 个主流新闻网站的头条新闻的总和：C. Silverman，“此分析显示病毒式虚假选举新闻报道如何胜过 Facebook 上的真实新闻”，*BuzzFeed*，16 2016 年 11 月。<https://www.buzzfeednews.com/article/craigsilverman/viral-fake-election-news-outperformed-real-news-on-facebook>

here ‘a form of psychosis’: <https://www.vox.com/2019/3/31/18289271/alex-jones-psychosis-conspiracies-sandy-hook-hoax>

这里是“一种精神病形式”：<https://www.vox.com/2019/3/31/18289271/alex-jones-psychosis-conspiracies-sandy-hook-hoax>

here ‘Let’s compare that – what is the aggregate traffic of the *New York Times*: Tristan said this to Decca Aitkenhead. The *Guardian* had c. 286 million visits in the six months to

September 2020; the *New York Times* nearly 354 million; the *Washington Post* just over 185 million, according to SimilarWeb.com. The 15 billion figure comes from here: <https://www.latimes.com/business/hiltzik/la-fi-hiltzik-tristan-tech-20190510-story.html>.

这里‘让我们比较一下——《纽约时报》的总流量是多少：特里斯坦对德卡·艾特肯黑德这样说。《卫报》有 c。截至 2020 年 9 月的六个月内，访问量达到 2.86 亿次；《纽约时报》接近 3.54 亿；据 SimilarWeb.com 统计，《华盛顿邮报》的浏览量略高于 1.85 亿。150 亿的数字来自这里：<https://www.latimes.com/business/hiltzik/la-fi-hiltzik-tristan-tech-20190510-story.html>。

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对 Twitter 上的极右翼人士进行的另一项研究发现，YouTube 是迄今为止他们最常访问的网站：J. M. Berger, “另类右翼 Twitter 普查：定义和描述 Twitter 上另类右翼内容的受众”，*VOX-Pol 卓越网络*, 2018 年。 https://www.voxpol.eu/download/vox-pol_publication/AltRightTwitterCensus.pdf

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“我们是否有一个系统，当你每天转动曲柄时，会系统地产生更多的激进主义？”特里斯坦对德卡·艾特肯黑德这样说道。

here that they weren't 'worthy' of it: C. Alter, 'Brazilian Politician tells Congresswoman she's "not worthy" of sexual assault', *Time*, 11 December 2014. <https://time.com/3630922/brazil-politics-congresswoman-rape-comments/>

在这里，他们“不值得”：C. Alter，“巴西政治家告诉国会女议员她“不值得”遭受性侵犯”，《时代》杂志，2014年12月11日。<https://time.com/3630922/brazil-politics-女议员强奸评论/>

here 'are not even good for breeding': <https://www.independent.co.uk/news/world/americas/jair-bolsonaro-who-is-quotes-brazil-president-election-run-off-latest-a8573901.html>

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here his supporters chanted 'Facebook! Facebook! Facebook!': C. Doctorow, 'Fans of Brazil's new Fascist President chant "Facebook! Facebook! Whatsapp! Whatsapp!" At inauguration', *BoingBoing*, 3 January 2019. <https://boingboing.net/2019/01/03/world-more-connected.html>

他的支持者在这里高呼“Facebook！”Facebook！Facebook！”：C.多克托罗，“巴西新法西斯总统的粉丝高呼“Facebook！Facebook！什么应用程序！什么应用程序！”就职典礼”，*BoingBoing*，2019年1月3日。<https://boingboing.net/2019/01/03/world-more-connected.html>

here 'the collective downgrading of humans and the upgrading of machines': Tristan said this to Decca Aitkenhead.

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这里“如果我们降低注意力范围，我们如何解决世界上最紧迫的问题：T. Harris，参议院商务委员会证词，2019年6月25日。<https://>

Chapter Eight

第八章

here ‘iPad time! iPad time!’: Nir Eyal, *Indistractable: How to Control Your Attention and Choose Your Life* (London: Bloomsbury Publishing, 2020), p. 213.

‘iPad 时间到了！ iPad 时间！’：Nir Eyal，《Indistractable：如何控制你的注意力并选择你的生活》（伦敦：Bloomsbury Publishing，2020 年），第 14 页。 213.

here He believes we should all try adopting a ‘ten-minute rule’: Ibid., pp. 41–2.

他认为我们都应该尝试采用“十分钟规则”：同上，第 41-2 页。

here He says you should ‘time-box’: Ibid., p. 62.

在这里他说你应该“时间盒”：同上，第 17 页。 62.

here have ‘office hours’: Ibid., p. 113.

这里有“办公时间”：同上，第 17 页。 113.

here He described it as a ‘cookbook’: Ibid., p. 1.

在这里，他将其描述为一本“食谱”：同上，第 17 页。 1.

here Nir writes: ‘Let’s admit it: we are all in the persuasion business: N. Eyal, *Hooked: How to Build Habit-Forming Products* (London: Penguin, 2014), p. 164. When I later read this quote to Nir, he said: ‘Well, you have to read the book, right?’

Nir 在这里写道：“让我们承认这一点：我们都在从事说服工作：N. Eyal，《Hooked：如何构建习惯形成产品》（伦敦：Penguin，2014 年），第 17 页。 164. 当我后来向 Nir 读到这句话时，他说：‘好吧，你必须读这本书，对吗？’

So if you just take it out of context, and just say that one sentence, of course you can make me say anything you want me to say.’ But I did read it in context, and I urge other people

to. Nothing in the context surrounding this sentence or the wider book mitigates the clear meaning of this sentence.

所以，如果你断章取义，只说一句话，当然你可以让我说你想让我说的任何话。”但我确实在上下文中读过它，并且我敦促其他人这样做。这句话周围的上下文或更广泛的书没有任何内容削弱这句话的明确含义。

here which he describes as ‘mind manipulation’: Ibid., p. 2.

他在这里将其描述为“精神操纵”：同上，第 17 页。 2.

here ‘Want to hook your users? Drive them crazy’: N. Eyal, ‘Want to Hook Your Users? Drive Them Crazy’, *TechCrunch* (blog), 26 March 2012. <https://techcrunch.com/2012/03/25/want-to-hook-your-users-drive-them-crazy/>

这里‘想吸引你的用户吗？让他们疯狂’：N. Eyal, ‘想吸引你的用户吗？让他们疯狂’, *TechCrunch* (博客), 2012 年 3 月 26 日。
<https://techcrunch.com/2012/03/25/want-to-hook-your-users-drive-them-crazy/>

here The goal of the designer is to create an ‘internal trigger’: Eyal, *Hooked*, p. 47.

这里，设计师的目标是创建一个“内部触发器”：Eyal, *Hooked*, 第 17 页。 47.

here he says they should imagine a user he names Julie, who ‘fears being out of the loop’: Ibid., p. 57.

在这里，他说他们应该想象一个他命名为朱莉的用户，他“害怕被排除在外”：同上，第 17 页。 57.

here Once you have succeeded in playing on feelings like this, ‘a habit is formed: Ibid., p. 18.

一旦你成功地利用了这样的感觉，“一种习惯就形成了：同上，第 17 页”。 18.

here Designers should get you and me ‘to repeat behaviours for long periods, ideally for the rest of their lives’: Ibid., p. 25.

在这里，设计师应该让你和我“长期重复行为，最好是在余生中重复”：同上，第 17 页。 25.

‘Habits can be very good for the bottom line’: Ibid., p. 17.

“习惯对盈利非常有好处”：同上，第 17 页。 17.

here Nir says there should be some ethical limits to this: He also lists some healthy uses of these techniques – for example, to design fitness apps that encourage people to go to the gym, or apps that help you learn another language.

尼尔在这里说应该有一些道德限制：他还列出了这些技术的一些健康用途——例如，设计鼓励人们去健身房的健身应用程序，或者帮助你学习另一种语言的应用程序。

here ‘Stress isn’t something imposed on us. It’s something we impose on ourselves’: Ronald Purser, *McMindfulness* (Repeater Books, 2019), p. 138.

这里‘压力不是强加给我们的。这是我们强加给自己的东西’：Ronald Purser, *McMindfulness* (Repeater Books , 2019) , 第 14 页。138.

here the top causes of stress in the US have been identified by scientists at Stanford Graduate School of Business in a major study: Ibid., p. 139, citing Dana Becker, *One Nation Under Stress: The Trouble With Stress As An Idea* (Oxford: Oxford University Press, 2013).

斯坦福大学商学院的科学家在一项重大研究中确定了美国压力的主要原因：同上，第 17 页。139，引用 Dana Becker，《一个国家面临压力：压力作为一种观念的麻烦》（牛津：牛津大学出版社，2013 年）。

here The average weight gain for an adult between 1960 and 2002 was 24 lbs, or 1.7 stone: <https://www.nytimes.com/2021/01/09/opinion/diet-resolution-new-years.html>, as accessed 12 January 2020.

1960 年至 2002 年间，成年人的平均体重增加为 24 磅，即 1.7 英石：<https://www.nytimes.com/2021/01/09/opinion/diet-resolution-new-years.html>，访问时 2020 年 1 月 12 日。

here The scientists who have studied it discovered that 95 percent of people in our culture who lose weight on a diet regain it within one to five years: The original study finding that 95 percent of diets fail was with one hundred obese patients: A. J. Stunkard and M. McLaren-Hume, ‘The results of treatment for obesity’, *AMA Archives of Internal Medicine*, 103, 1959, pp. 79–85. Other more recent studies have found very similar outcomes – in this one, only 2 percent of people maintained a greater than 20 kg weight loss two years later: J. Kassirer and M. Angell, ‘Losing weight—an ill-fated New Year’s resolution’, *New England Journal of Medicine*, 338, 1998, pp. 52–4.

研究它的科学家发现，在我们的文化中，95% 的通过节食减肥的人会在一到五年内恢复体重：最初的研究发现 95% 的节食失败是针对 100 名肥胖患者：A. J. Stunkard 和 M. McLaren-Hume，“肥胖治疗的结果”，AMA 内科档案，103，1959 年，第 79-85 页。最近的其他研究也发现了非常相似的结果——在这项研究中，只有 2% 的人在两年后体重减轻了 20 公斤以上：J. Kassirer 和 M. Angell，“减肥——一个命运多舛的新年决心”，新英格兰医学杂志，338，1998 年，第 52-4 页。

Some scientists argue this is too pessimistic or defining success too demanding. See, for example, R. R. Wing and S. Phelan, ‘Long-term weight loss maintenance’, *The American Journal of Clinical Nutrition*, vol. 82, issue 1, 2005, pp. 222S–225S. They argue we should define success as somebody who maintains 10 percent weight loss one year after the diet. But even if you use this redefinition, only about 20 percent of dieters can manage it, and 80 percent fail.

一些科学家认为这过于悲观或对成功的定义过于苛刻。例如，参见 R. R. Wing 和 S. Phelan，“长期减肥维持”，《美国临床营养学杂志》，第 1 卷。82，第 1 期，2005 年，第 222S–225S 页。他们认为，我们应该将成功定义为在节食一年后体重减轻了 10% 的人。但即使使用这种重新定义，也只有大约 20% 的节食者能够做到，80% 的人都失败了。

This article covers the 1959 study and argues it's too negative: <https://www.nytimes.com/1999/05/25/health/95-regain-lost-weight-or-do-they.html>

本文介绍了 1959 年的研究，并认为其过于消极：<https://www.nytimes.com/1999/05/25/health/95-regain-lost-weight-or-do-they.html>

See also T. Mann, *Secrets from the Eating Lab* (New York: Harper Wave, 2017). The author reviewed sixty years of diet literature and found that on average dieters lose 10 percent of their starting weight, and within two years they've on average regained all but about two of those pounds.

另请参阅 T. Mann，《饮食实验室的秘密》（纽约：Harper Wave，2017 年）。作者回顾了 60 年的饮食文献，发现节食者平均减掉了起始体重的 10%，而在两年内，他们平均体重又恢复了，除了大约两磅之外。

here like the US and UK, have very high levels of obesity: More than 42 percent of US adults and 18.5 percent of US children were obese in 2018. There's been twenty years of steady increase: 'Overweight & Obesity Data & Statistics', Centre for Disease Control and Prevention. <https://www.cdc.gov/obesity/data/index.html>

与美国和英国一样，肥胖率非常高：2018 年，超过 42% 的美国成年人和 18.5% 的美国儿童肥胖。已经有二十年的稳步增长：“超重和肥胖数据与统计”，中心用于疾病控制和预防。<https://www.cdc.gov/obesity/data/index.html>

In 2018, 15 percent of Dutch adults were obese – much less, but they still (rightly) consider this to be a major public health crisis. See C. Stewart, 'Share of the population with overweight in the Netherlands', *Statista*, 16 November 2020. <https://www.statista.com/statistics/544060/share-of-the-population-with-overweight-in-the-netherlands/>

2018 年，15% 的荷兰成年人患有肥胖症——这一比例要低得多，但他们仍然（正确地）认为这是一场重大的公共卫生危机。参见 C. Stewart，“荷兰超重人口比例”，Statista，2020 年 11 月 16 日。<https://www.statista.com/statistics/544060/share-of-the-population-with-overweight-in-netherlands/> -荷兰人/

Chapter Nine

第九章

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这种模式在这里运作得非常好，以至于它成为世界上最受尊敬的媒体组织：D. Marshall，“BBC 2020 年最值得信赖的新闻来源”，Ipsos Mori，2020 年 5 月 22 日。<https://www.ipsos.com/ipsos-mori/en-uk/bbc-most-trusted-news-source-2020>；W.

Turvill, “调查：美国人对 BBC 的信任度超过《纽约时报》、《华尔街日报》、ABC 或 CBS”，新闻公报，2020 年 6 月 16 日。<https://www.pressgazette.co.uk/survey-americans-比《纽约时报》、《华尔街日报》、《美国广播公司》或《哥伦比亚广播公司》更信任英国广播公司/>

here ‘Just turn it off. They can turn it off in a heartbeat’: Tristan said this to Decca Aitkenhead.

这里‘把它关掉。他们可以立即将其关闭’：特里斯坦对德卡·艾特肯黑德说道。

here Amazon found that even 100 milliseconds of delay: G. Linden, ‘Marissa Mayer at Web.20’, Glinden (blog), 9 November 2006. <http://glinden.blogspot.com/2006/11/marissa-mayer-at-web-20.html>

亚马逊在这里发现即使有 100 毫秒的延迟：G. Linden, “Marissa Mayer at Web.20”, Glinden (博客), 2006 年 11 月 9 日。<http://glinden.blogspot.com/2006/11/marissa-mayer-at-web-20.html>

See also <http://loadstorm.com/2014/04/infographic-web-performance-impacts-conversion-rates/>.

另请参阅<http://loadstorm.com/2014/04/infographic-web-performance-impacts-conversion-rates/>。

See also R. Colville, *The Great Acceleration: How the World is Getting Faster, Faster* (London: Bloomsbury, 2016), p. 27.

另请参见 R. Colville, 《伟大的加速：世界如何变得越来越快、越来越快》(伦敦：Bloomsbury, 2016 年)，第 14 页。27.

here Nir responds by pointing to a recent study by the coder Mark Ledwich: M. Ledwich and A. Zaitsev, ‘Algorithmic Extremism: Examining YouTube’s Rabbit Hole of Radicalisation’, arXiv:1912.11211 [cs.SI], Cornell University, 2019.

Nir 对此作出回应，指出了编码器 Mark Ledwich 最近的一项研究：M. Ledwich 和 A. Zaitsev, “算法极端主义：审视 YouTube 的激进化兔子洞”，arXiv:1912.11211[cs.SI]，康奈尔大学，2019 年。

<https://arxiv.org/abs/1912.11211>

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另请参阅 A. Kantrowitz, “YouTube 激进了吗?”, *OneZero*, 2020 年 1 月 7 日。 <https://onezero.medium.com/does-youtube-radicalize-a-debate-between-kevin-roose-and-mark-ledwich-1b99651c7bb>; W. Feuer, “批评者猛烈研究声称 YouTube 的算法不会导致激进化”, *CNBC*, 2019 年 12 月 30 日, 2019 年 12 月 31 日更新。 <https://www.cnn.com/2019/12/30/critics-slam-youtube-study-showing-no-ties-to-radicalization.html>

here Tristan, in response, directs people towards the Princeton academic Professor Arvind Narayanan: A. Narayanan, Twitter post 29 December 2019, 12.34pm. https://twitter.com/random_walker/status/1211264254109765634?lang=en

作为回应, 特里斯坦将人们引向普林斯顿大学学者阿尔文德·纳拉亚南 (Arvind Narayanan) 教授: A. Narayanan, Twitter 帖子, 2019 年 12 月 29 日中午 12 点 34 分。 https://twitter.com/random_walker/status/1211264254109765634?lang=en

here One day, in the spring of 2020, it was revealed what Facebook actually thinks about these questions: J. Horwitz and D. Seetharaman, ‘Facebook Executives Shut Down Efforts to Make the Site Less Divisive’, *Wall Street Journal*, 26 May 2020. <https://www.wsj.com/articles/facebook-knows-it-encourages-division-top-executives-nixed-solutions-11590507499>

2020 年春天的一天, Facebook 对这些问题的实际想法被揭晓: J. Horwitz 和 D. Seetharaman, “Facebook 高管关闭了减少网站分裂的努力”, 《华尔街日报》, 2020 年 5 月 26 日。 <https://www.wsj.com/articles/facebook-knows-it-encourages-division-top-executives-nixed-solutions-11590507499>

here that wasn’t wrecking the world: The *Wall Street Journal* article

balanced these claims by quoting from Zuckerberg. They wrote: ‘Mr. Zuckerberg announced in 2019 that Facebook would take down content violating specific standards but where possible take a hands-off approach to policing material not clearly violating its standards.

这并没有破坏世界：《华尔街日报》的文章通过引用扎克伯格的言论来平衡这些说法。他们写道：‘先生。扎克伯格在 2019 年宣布，Facebook 将删除违反特定标准的内容，但在可能的情况下，对不明显违反其标准的内容采取不干涉的态度。

“You can’t impose tolerance top-down,” he said in an October speech at Georgetown University. “It has to come from people opening up, sharing experiences, and developing a shared story for society that we all feel we’re a part of. That’s how we make progress together.”

“你不能自上而下地强加宽容，”他十月份在乔治城大学的一次演讲中说道。“它必须来自于人们敞开心扉，分享经验，并为我们都觉得自己是社会一部分的社会创造一个共同的故事。这就是我们共同进步的方式。”

here ‘But if you can’t rape your wife, who can you rape?’: A. Dworkin, *Life and Death: Unapologetic Writings on the Continuing War Against Women* (London: Simon & Schuster, 1997), p. 210.

这里“但如果你不能强奸你的妻子，你还能强奸谁？”：A. Dworkin , 《生与死：关于对妇女的持续战争的无悔著作》（伦敦：Simon & Schuster , 1997 ）, 第 17 页。 210.

Chapter Ten

第十章

here ‘The problem was’: N. Burke Harris, *The Deepest Well: Healing the Long-Term Effects of Childhood Adversity* (London: Bluebird, 2018), p. 215.

这里的“问题是”：N. Burke Harris , 《最深的井：治愈童年逆境的长期影响》（伦敦：Bluebird , 2018 ）, 第 14 页。 215.

here It’s named the Adverse Childhood Experiences Study: V. J.

Felitti et al., 'Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) study', *American Journal of Preventive Medicine*, 14 (4), 1998, pp. 245–58.

这里它被命名为“不良童年经历研究”：V. J. Felitti 等人，“童年虐待和家庭功能障碍与许多成人死亡主要原因的关系：不良童年经历 (ACE) 研究”，美国预防医学杂志，14 (4)，1998 年，第 245–58 页。

I have also been informed here by my interviews with Dr Vincent Felitti, Dr Robert Anda and Dr Gabor Maté. See Gabor Maté's book *In the Realm of Hungry Ghosts: Close Encounters With Addiction* (London: Vermilion, 2018).

我还通过对 Vincent Felitti 博士、Robert Anda 博士和 Gabor Maté 博士的采访了解了这一点。请参阅 Gabor Maté 的书《饿鬼王国：与成瘾的亲密接触》（伦敦：Vermilion，2018 年）。

here Children who had experienced four or more types of trauma were 32.6 times more likely: Harris, *The Deepest Well*, p. 59.

经历过四种或以上类型创伤的儿童的可能性要高出 32.6 倍：Harris，《最深的井》，第 14 页。59.

here–here Dr Nicole Brown, in a separate body of research, found that childhood trauma tripled the development of ADHD symptoms: R. Ruiz, 'How Childhood Trauma Could Be Mistaken For ADHD', *The Atlantic*, 7 July 2014.

Nicole Brown 博士在另一项研究中发现，童年创伤使 ADHD 症状的发展增加了两倍：R. Ruiz，“童年创伤如何被误认为 ADHD”，《大西洋月刊》，2014 年 7 月 7 日。

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Chapter Eleven

第十一章

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美国工人平均每天加班三个小时：M. F. Davis 和 J. Green，“疫情期间的工作日增加了三个小时，破坏了工作与生活的平衡”，彭博社，2020 年 4 月 23 日。<https://www.bloomberg.com/news/articles/2020-04-23/covid-era> 在家工作意味着工作时间还要多三个小时

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Chapter Twelve

第十二章

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英国国家医疗服务体系 (British National Health Service) 经过仔细事实核查的官方网站对此发出了警告：“睡眠和疲劳”，NHS 网页。
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Chapter Thirteen

第十三章

here genetics account for ‘75 to 80 percent’ of ADHD: When I asked him for a citation on this, he replied: ‘An authoritative citation is S. Faraone and H. Larsson, “Genetics of attention deficit hyperactivity disorder”, *Molecular Psychiatry*, 2018. They estimate heritability at 74 percent, slightly more conservative

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四十多年来，艾伦和他的团队一直在研究同样的 200 个人：从这项研究中得出了大量的研究成果。其中最突出的是 D. Jacobvitz 和 L. A. Sroufe，“幼儿园中早期看护者与儿童的关系和注意力缺陷障碍与多动症：一项前瞻性研究”，《儿童发展》，58，1987 年，第 1,496-504 页；E. Carlson、D. Jacobvitz 和 L. A. Sroufe，“注意力不集中和多动的发展调查”，《儿童发展》，66，1995 年，第 37-54 页。

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here One of the many things they wanted to figure out is: what factors in a person’s life: See Alan Sroufe’s brilliant book *A Compelling Idea: How We Become the Persons We Are* (Brandon, Vermont: Safer Society Press, 2020), pp. 60–5. See also Sroufe’s *The Development of the Person: The Minnesota Study of Risk and Adaptation From Birth to Adulthood* (New York: Guilford Press, 2009).

他们想要弄清楚的许多事情之一是：一个人的生活中有哪些因素：请参阅 Alan Sroufe 的精彩著作《一个令人信服的想法：我们如何成为我们的人》（布兰登，佛蒙特州：安全社会出版社，2020 年），第 173 页。60-5。另请参阅 Sroufe 的《人的发展：明尼苏达州从出生到成年的风险和适应研究》（纽约：吉尔福德出版社，2009 年）。

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Chapter Fourteen

第十四章

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关于作者的注释

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